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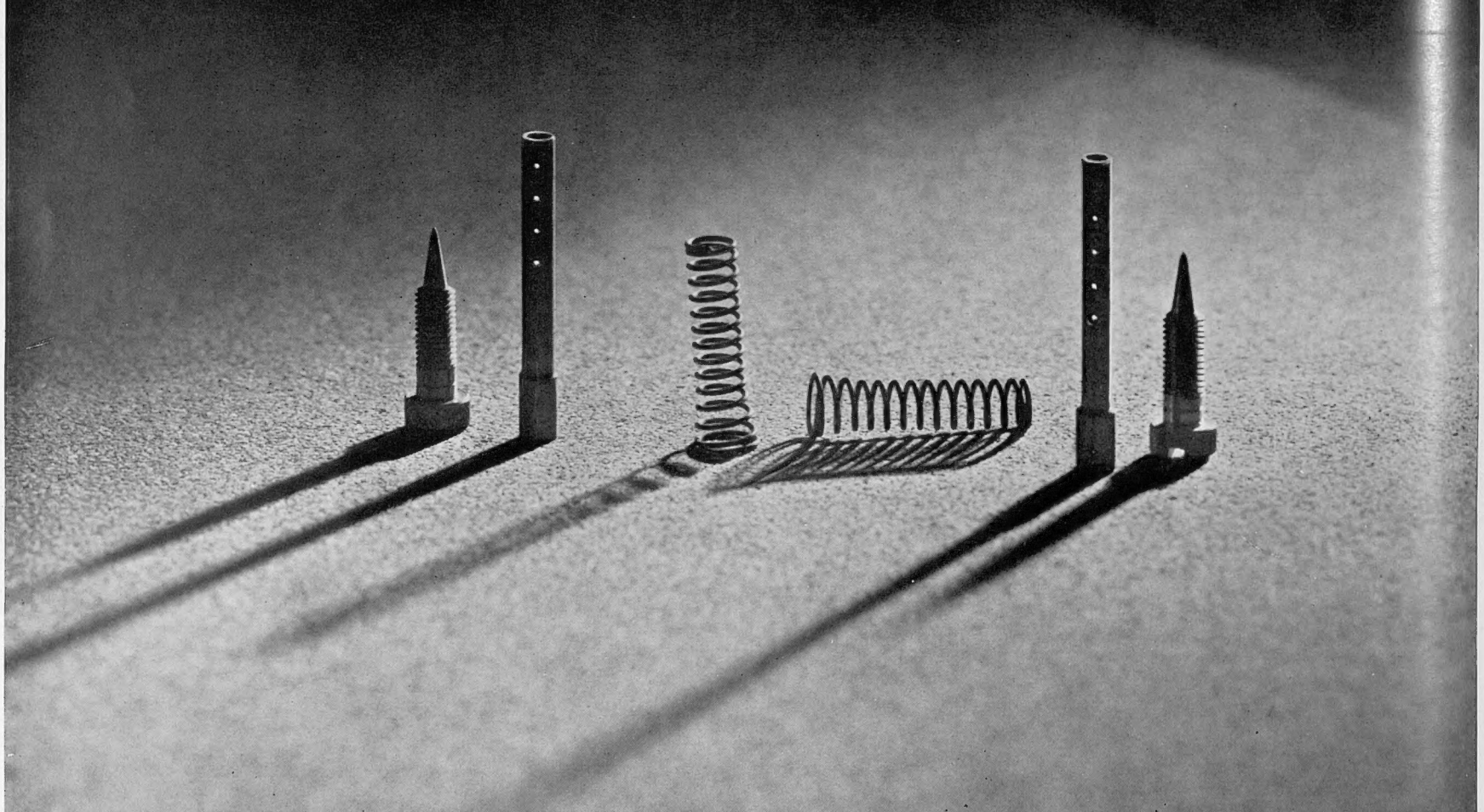

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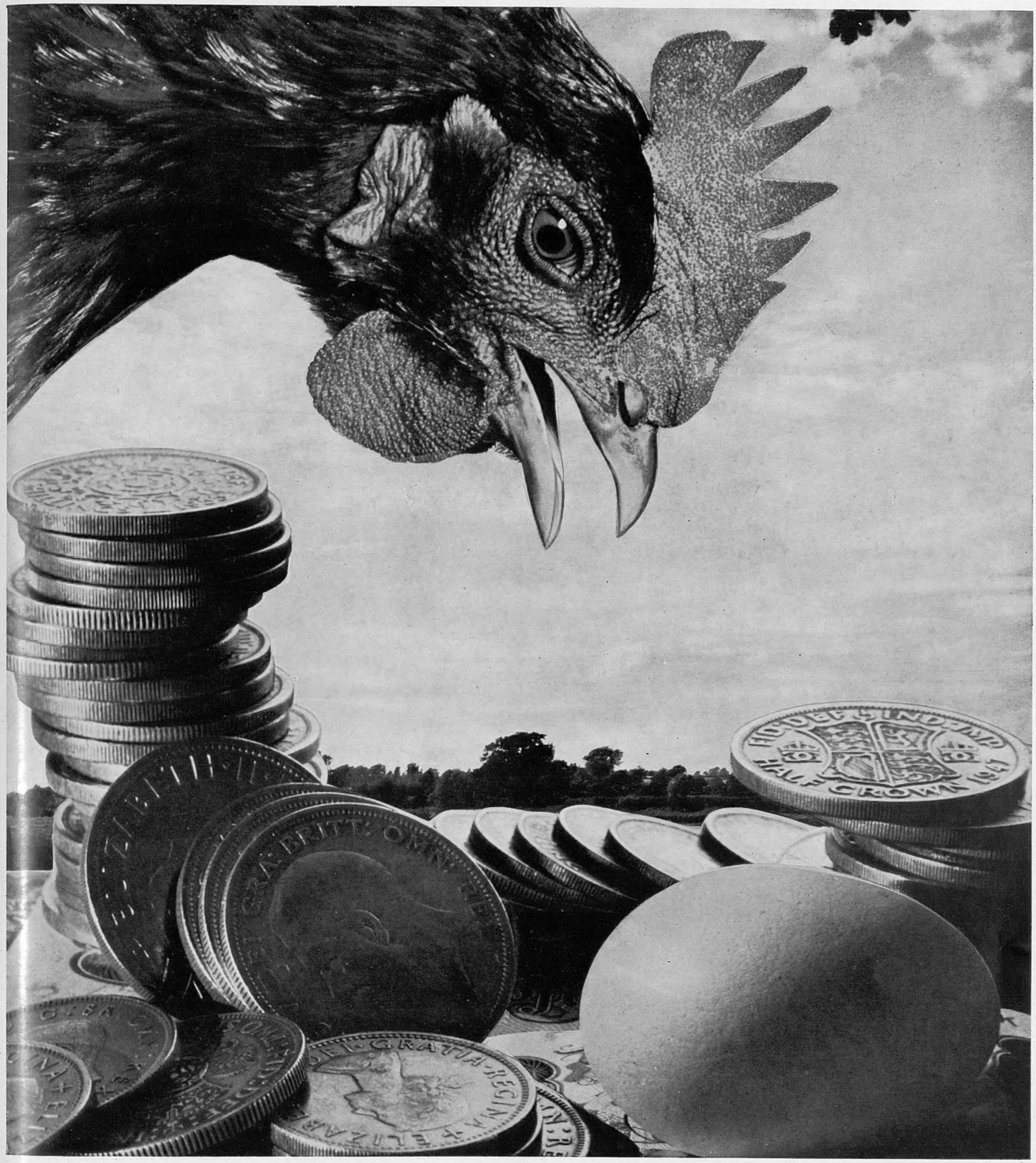

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The finance of agriculture and of its many ancillary trades is a very substantial part of our business, and it is proper that money should be in the forefront of the picture. We take pride in our share in farming, and indeed in every other kind of business enterprise, but our part is primarily a financial one; for after all, our business is money.

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Volume CCXXXII No. 3025

The SPHERE, London, March 22, 1958

The SPHERE

with which is incorporated THE GRAPHIC

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ON THE FIRST STAGE OF THE GREAT TRANS-POLAR JOURNEY—TRACKED VEHICLES OF DR. FUCHS' EXPEDITION PASSING THE SHACKLETON RANGE : In the centre of the picture, which was received in London at the end of last week, is the party's single Muskeg. This vehicle was one of those abandoned on the Polar plateau according to the plan by which most economical use was made of fuel supplies. The members of the Commonwealth Trans-Antarctic party arrived in New Zealand last Monday.

In this issue of *The Sphere* are several pages of pictures and sketches of the Trans-Antarctic Expedition and an article by E. A. A. Shackleton surveying Dr. Fuchs' epic achievement. Mr. Shackleton, himself an explorer of distinction, is the son of the famous Polar explorer who, over forty years ago, first tried to translate the dream of the trans-Polar journey into reality, and failed so heroically. Although Dr. Fuchs and his team could call on a variety of modern aids unknown to earlier explorers, Mr. Shackleton stresses that in the ultimate analysis their victory depended on that human endurance and courage of the supreme standard which Polar exploration inevitably demands. Our frontispiece here shows the column of tracked vehicles on the early but in many ways the hardest part of the journey. This was the climb past three ranges to the depot at South Ice. There they reached the vast plateau encircling the Pole. The men who have added a glorious and unique page to the annals of British Commonwealth Polar exploration arrived in New Zealand last Monday, where they received a tremendous welcome. (Further pictures on pages 450-52 and 462-67).

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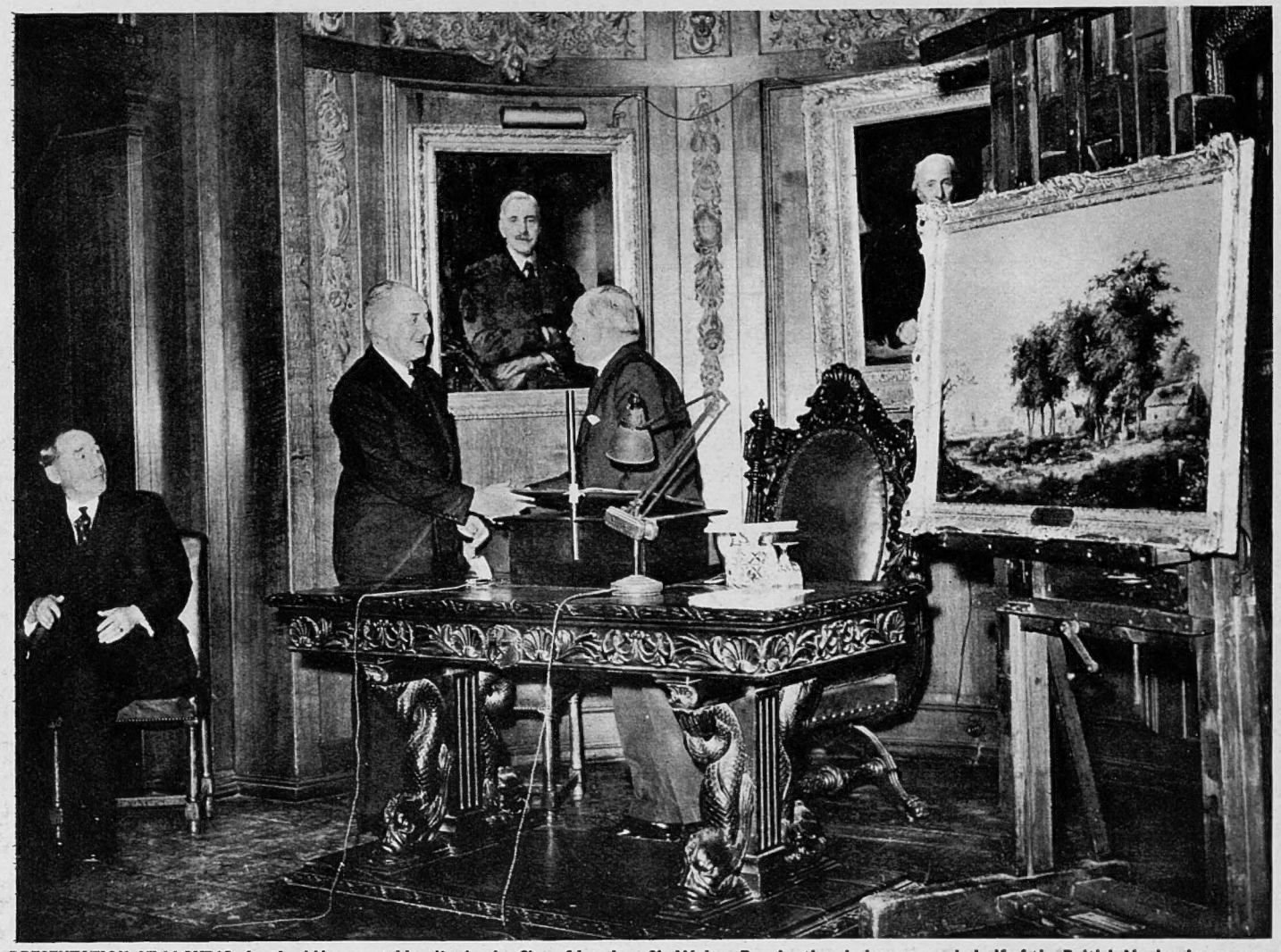

PRESENTATION AT LLOYD'S: In the Library at Lloyd's, in the City of London, Sir Walter Barrie, the chairman, on behalf of the British Marine insurance market, presents a painting to Mr. Harold H. Mummery, underwriter of the London Assurance. The painting (which is seen on the right of the picture) was presented in recognition of Mr. Mummery's services as deputy chairman of the Joint Hull Committee from 1939 to 1954.

THE COURSE OF A NEW MOTORWA woods at Gorsley, in Glouceste of the projected route from t

A London Newsletter

The Queen Mother.—The nation very warmly welcomed home the Queen Mother on her return from her exhaustive and, no doubt, exhausting visits to New Zealand and Australia which have given so much delight wherever she went. Exhaustive, indeed. She covered uncountable miles in the air so that no corner of those wide dominions should feel left out in the cold or denied the warmth and sympathy of her charming smile. It is odd to recall that King George V never flew and that so short a time ago flying as the normal means of transport for Royal personages or V I.P.'s was not even a *calculated* risk to be taken. Her long delay at Mauritius, which caused such disappointment to Kenya, suggested that the official mind has come to regard a plane prepared and serviced for a Royal progress, as accident-proof. Football stars were much slower to accept such a confident view. And exhausting? The Queen Mother showed herself to be "bronzed and well," "as fresh as a daisy," as if she had returned from a week's visit to Braemar in summer. Yet what she was called on to endure in long hours of travel, constant sharp changes of climate, long engagements, dust and wind and rain and stresses, might well have taxed the strength of the strongest. Autolycus had a word for it. "A merry heart goes all the day" and is never merrier than when duty, sympathy and intense human interest inspire it and the certainty of admiration encourages it. It is the non-political ambassadors who nowadays bring back the fine and sweet fruits of missions.

The King-Hall Plan.—The most fearful issue of our time—nuclear defence—is made so not so much by its complexity as by its bald simplicity. Broadly, the decision to make, and if necessary to use, H-bombs and other nuclear weapons is black or white; the introduction of shades of grey confuses and even introduces ridicule into the long controversy to many minds. Devout Christians hold that there is no compromise possible between obeying God's ordinances or following the works of the Devil. Other clever men, who do not call religion in aid, argue that it is a choice between world suicide or Communist domination. But for the most part responsible Western statesmen consider that there is room for compromise and that the problem is not wholly black or white, and they introduce and favour various semi-tones. For these reasons, Stephen King-Hall's *Defence in the Nuclear Age* is entitled to be read and studied, if only for its courage and sincerity. Any man who is prepared to endure ridicule or even contempt as an "appeaser" or passive resister, despite the lessons of the last war, is entitled to respect at a time when all shades of opinion are as befogged as they are diffident and even shame-faced; even if his opinions when examined may lead to a *reductio ad absurdum*, at least they will underline the absurdity of many other opinions. Briefly, Sir Stephen argues that Britain, and any other Western power that agrees, should now renounce armaments of all kinds (except virtually "police truncheons"), rely no longer on American strength of arms with its foreign bases and installations, and take the grave risk that that gesture might well result in Communist occupation and domination. These are to be defeated and made of none effect by a carefully planned and executed system of mass-resistance by passive means, with the hope that the first gesture of renunciation might induce Russia to a change of heart and an equal renunciation of Communist domination; or, that failing, that our Christian and obstinate humility under domination, would destroy any fruits of occupation.

"Reductio ad Absurdum?"—The courage in the King-Hall plan is best measured by imagining how such a proposal would have struck our grandfathers, that race of Englishmen famed for their fierce individuality, the generation that man-handled "General Hyena" at a London brewery, that backed Pam whenever he raised the cry of *Civis Romanus sum*, that had a ready and forcible answer to any attempt to dictate to them by local pygmy or foreign giant. No doubt, it is different to-day. As a nation we are not so strong and successful. The Welfare State has well begun the sorry business of turning us into spoon-fed robots, sapping our fierce individuality. We live in evil days, we taste too much humiliating defeat, are becoming cowed with anxieties, have lost faith, pride, courage and patience during this long drift in the doldrums, and we ask ourselves who will show us any good.

The King-Hall plan might find supporters despite the joints in its harness. If Europe renounces America, for instance, the two nuclear giants would still face each other defiantly and their battleground would still be *our* cities and fields, to be blasted before their own. One instance is enough, perhaps, but certainly Western Europe, prostrate and enslaved, would still provide a choice of *casus belli*. I am not sure that a Paris de-magnetised, disillumined and uglified by Soviet regulations would not be enough to decide all "good Americans" to launch the warheads in defence of their last, long home. If you read the King-Hall plan and find it reduced to absurdity, you are still no nearer a solution of the problem. For no solution can rule out suicide, even if bankruptcy and the *status quo* are better bets than slavery. Perhaps the chief effect of his book will be to reduce the number of black-and-white artists and encourage a larger examination of the semi-tones and compromises, if the tubes have not run dry.

Robbery Under Arms.—The wage-bandits increase in daring. It is fair to say that "not a day passes" but a wage-raid is in the news. Up to a point these raids are usually successful—that is to say, the raiders usually get away with a fair sum and escape in a stolen car which they abandon after a short distance. Many of them, of course, later on are brought to justice, but I presume that in the last few months the majority have so far evaded capture. The police must long since have found the problem of prevention and detection a very serious one. The Home Office must now share their anxiety. The employers, who must collect (and lose) these substantial sums drawn for wages seem still to take the risks fairly easily. The argument for some method of wage payment by cheque is strong. The difficulties in the way of such a readjustment are, of course, formidable. But I should

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general view of the course of the new Ross Spur Motorway which will cut through the undreds of trees have been felled to make way for the motorway, which will form part idlands to South Wales. The trees will be used as pit props. (See also page 482.)

A NEW PORTRAIT OF THE POPE: The life-size portrait by Mr. Leonard Boden has been offered to the Vatican as a gift from London's Italian community. During a ceremony at St. Peter's Roman Catholic Church in Clerkenwell, it was accepted by Archbishop O'Hara, the Apostolic Delegate. Standing with the Archbishop and the artist is Father Joseph de Filippi rector of St. Peter's. The painting was originally commissioned by Mr. Charles Forte to hang in the church.

ave thought that in most cases arrangements could be nade with a bank situated close to factory or business remises to pay out the weekly wage to each individual mployee, even if it meant a short concession of time off o enable him to draw his money. And it would surely ay the police to put extra guards over the bank at any ime when substantial extra funds were needed for a ay-out. Banks are provided with better devices to prevent aids and always are alive to the risks since they habitually old very large deposits of bullion and scrip. I should ave thought also that electrical engineers and inventors ould still do more to diddle the raiders of banks and ewellers. A hidden switch could surely be devised to perate a circuit which would freeze the raiders *in situ* ntil the police arrived. Our inventors can contrive more onderful devices than that. The problem has certainly eached the rank of national importance and concern. I onder whether such robbery-under-arms has been introduced into law-abiding Britain by our ever-growing foreign lement. I should be interested to examine the nationality tatistics of the last 100 of these miscreants who have been aught and convicted.

Future of the Welfare State.—I find myself in cordial agreement with Mr. Peter Goldman's ensible pamphlet in which he advocates a " major shift " n the nature and emphasis of social spending. Its direction hould be away from the crude services which working eople ought now to be able to provide for themselves. t should be towards modern services crying out for ommunity effort or finance. These last, he considers, nclude problems of social adjustment, the creation of the inest conditions of environment and, of course, education. His blood boils (as mine does) when he observes the quandering of public money on indiscriminate benefits nd subsidies for citizens, many of whom do not need them r want them, or if they do, could easily provide them or themselves. For example, do young couples on the 2,000-a-year-plus level deserve all the benefits supplied ree when their babies are born, and is it just that the mployers of foreign domestics should contribute so highly o long-term benefits for those who have no intention of qualifying for them, when free health services for a couple f years is the most they require? By and large, as we all realise, the rise in wages, claimed to be based on the ise in living costs, is subsidising luxuries, killing parental esponsibility and pride, and turning a nation, once fiercely ndividualistic, into coddled morons. But give an ell nd it takes a very courageous Government to withdraw n inch. " What I have I hold " is the motto alike of iants and pygmies who have votes to cast.

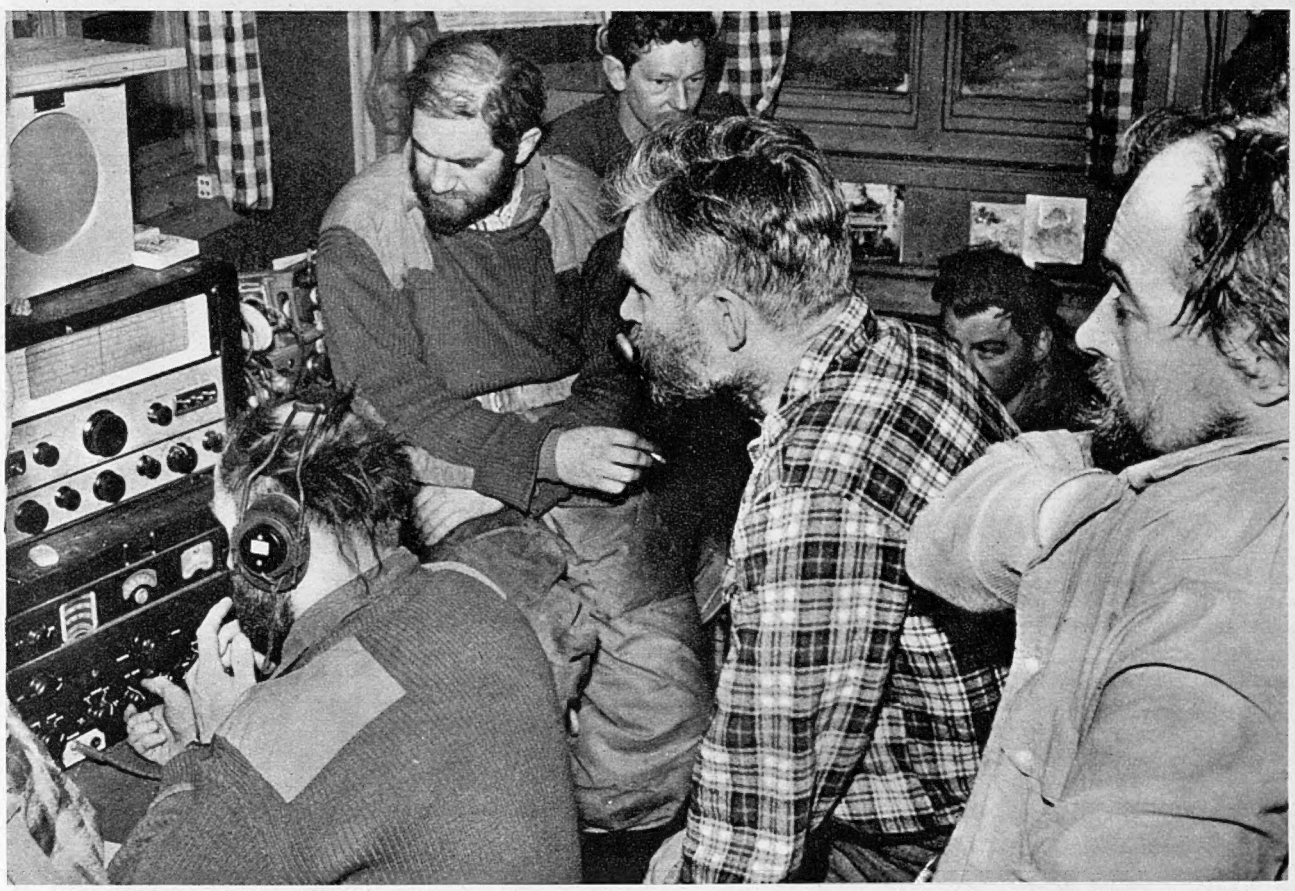
Wolfenden Reform.—The most controversial f the Wolfenden proposals for reform has received backing rom a large number of signatories in every walk of intellectual life. The signatories include an ex-Premier, bishops, politicians, philosophers, scientists, poets, writers, publishers, broadcasters—male and female. All of them press for early reform to exclude from criminal proceedings homosexual acts between consenting adults in private. It is obvious that all these men and women have not come out into the open without intensive examination of the arguments in the report, and have made up their minds courageously to announce that the advantages in the reform outweigh the social disadvantages. It strikes me that these intellectuals are still a tiny minority even among their intellectual kind. The vast bulk of the nation, educated and intelligent or otherwise, have not yet exhaustively weighed the arguments and are in no position to press for such a reform, or if they have done so, they have found no justification for reform. In my opinion, they will be more interested in spelling through the names of the signatories in the letter to *The Times* of March 7 than in weighing the arguments set forth above the signatures. I doubt very much whether these forty signatures will move this Government to alter the law as it stands, for in all such reforms it is bound to consider the opinions of a vast majority of the nation. And that vast majority is not yet ready to pronounce a verdict. It is a gesture—honest and courageous no doubt—but no more than a gesture, with perhaps a long-term influence. Parliament and the Government for the next three years have more urgent business to carry through and it surprises me that those signatories do not appreciate that fact.

Stepping Up Fines.—A Private Member's Bill to increase from 40s. to £10 the maximum penalties for threatening or insulting behaviour in public places got a second reading with the blessing of the Home Office. The Bill merely seeks to amend the Metropolitan Police Act of 1839 and hardly scratches the surface of the problem of antiquated maximum fines for scores of offences fixed by statute or by-laws a century ago when £2 was anything but chicken-feed. Law reform moves all too slowly and there is only moderate comfort in learning that the Home Office is starting a review of statutory maximum fines. To make the penalty fit the crime is the basis of justice, law and order, and for years past that duty has been burked. A fine of £2 in 1858 was certainly as severe a deterrent as one of £10 to-day. Take mass poaching. Men who often got away with a dozen pheasants hid in a lorry have felt no hardship in paying a fine of £2, if unlucky enough to be caught red-handed, since their luckier ventures had probably netted them thrice that sum each time. Certain maximum fines have, of course, recently been increased, but much remains to do if the fine as a penalty is to be a deterrent and not a mere item on a record of misdemeanour; and Mr. Stevens' Bill, if it become law, is no more than a token pointer to the crying need for rationalisation of antiquated and almost meaningless penalties for scores of offences. London Teddy-boys and Teddy-boy students are not the only offenders who need to be more rigorously deterred.

Gardens Again.—The daisies are spangling the rough and worm-cast lawns again, the bees are in the heaths and the sulphur butterflies are fluttering between blizzards. It is time to think again about the gardens of England coming back to beauty and about the *National Gardens Scheme*. It still grows in popularity and reaped last year the usual handsome benefit for retired district nurses in distress and for National Trust gardens. The attendance, if not the receipts, was a record. Once again Kent, the garden of England, took the county record, though Sussex, if east and west are combined, easily beat it. The Royal gardens, of course, contribute a handsome share of the total. The East and West Ridings lag sadly behind the North, and there are some counties in Wales which could do much better. After thirty years the gardens scheme has netted £350,000 for its beneficiaries and proved its value. Indeed, its hidden virtues are no less outstanding. It is an astonishingly successful creator of fellowship and friendship, a fine reward for the labours of amateur and professional gardeners. The small gardens contribute a great part of the year's total, and there is no place for humility in the scheme. The humblest garden that receives devoted labour can be assured of a hundred appreciative visitors from all over the world. There is no place for humility, then, and none for complacency. The scheme must go on growing. In our ugly, strident world we must go on digging for peace and beauty for ourselves and for others. This truth should encourage many owners of small gardens to come into the scheme next year.

The Choice of Weapons.—What diverse and curious weapons men still employ to fight for their principles, their politics, their honour, independence and tastes. The H-bomb is first favourite with statesmen. Cabinet ministers in Latin America, it seems, may use sabres with which to slash each other to death, if possible. Statesmen of Latin race in Europe often choose inkpots. People who are determined to prove their fitness for independence and self-government prefer bombs and long knives, and students seeking to show the fine fruits of higher education find soot and flour bags, rotten tomatoes and potatoes appropriate weapons. Such weapons are not for octogenarians, and Mr. A. E. Matthews in his fight against subtopia perforce employed the sit-down strike. I am not sure that if " offered the choice " of sabres or " sit-down " under the weather conditions of last week, I should not have plumped for sabres. To sit over a hole in a dressing-gown outside one's house with a thermometer below freezing point is not my cup of tea, but no man has better right to prove the importance of being earnest by revealing the guts of Bulldog Drummond than the old actor who is a general favourite and I wish that his choice of weapons might have proved effective.

THE OLD STAGER

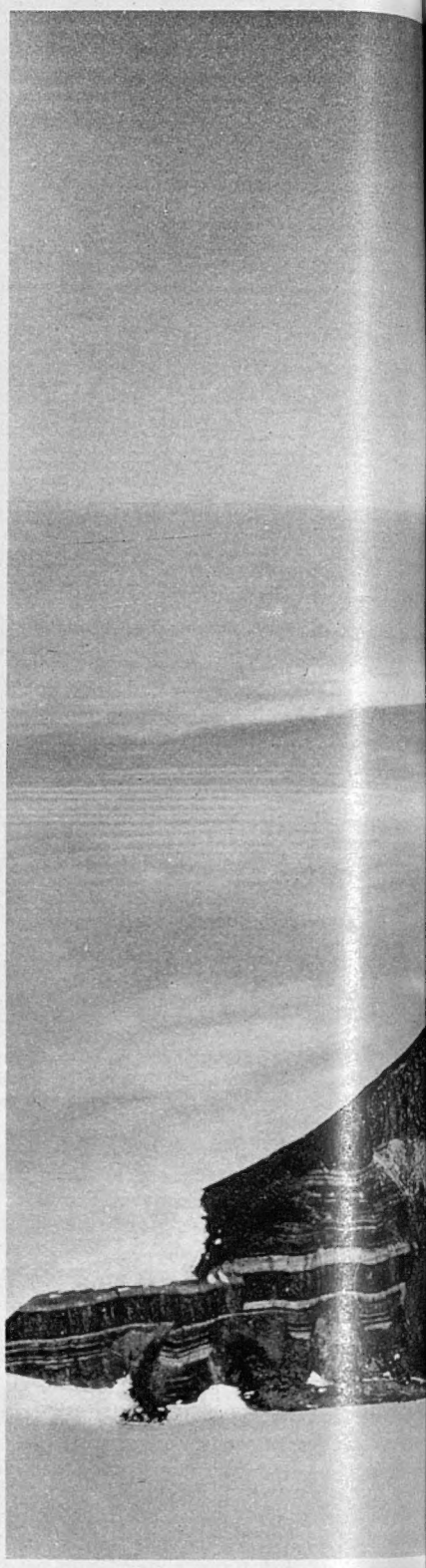


Trans-Antarctic Epic

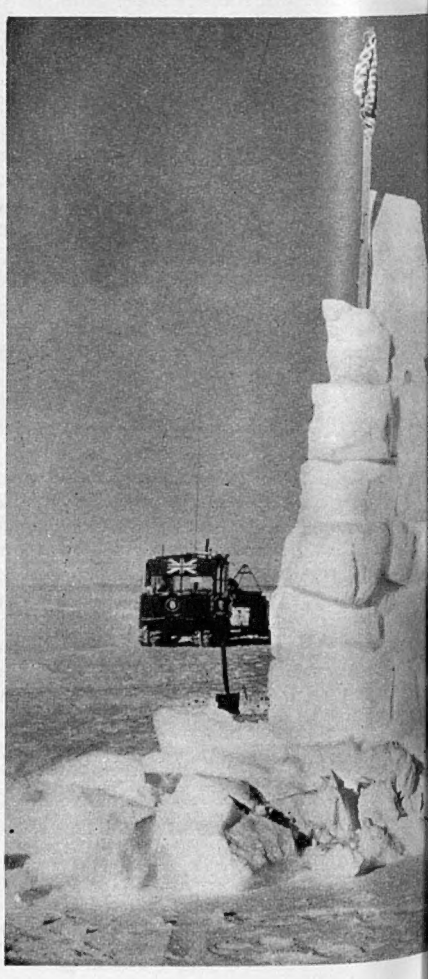
En Route to the Pole

Dr. Fuchs and his Party on the First Half of Their Journey

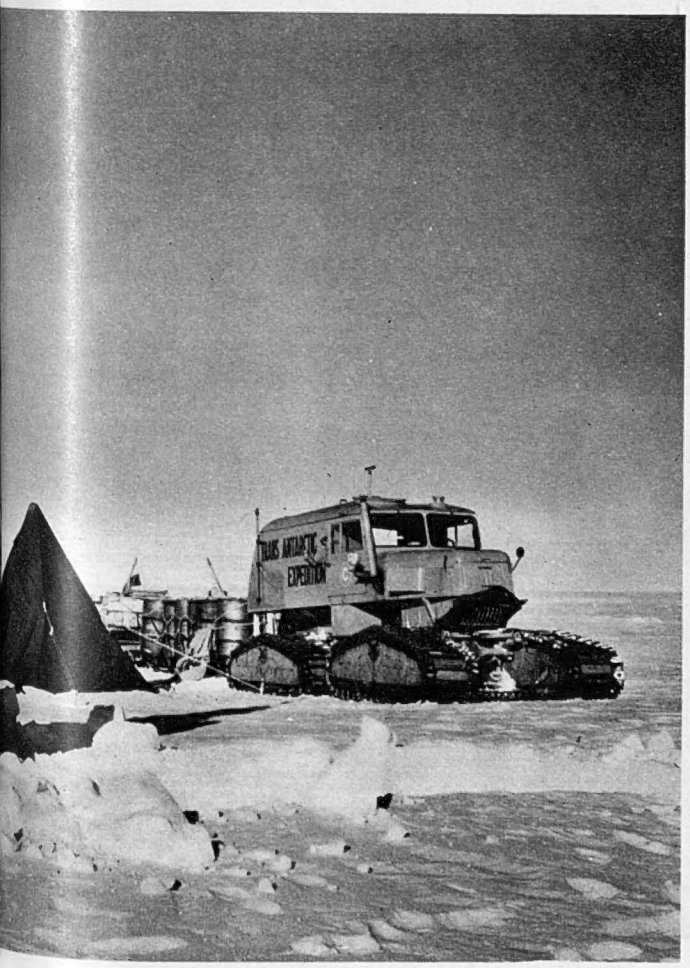
AT THE BASE CAMP: Dr. Vivian Fuchs (centre in check shirt) listens with other members of his team in the radio room at Shackleton Base on the ice shelf above Vahsel Bay, in the Weddell Sea. The Advance Party established the base in January 1956. A year later the Main Party arrived. Here through the darkness of the long Polar winter they made the final plans by which they became the first men ever to make the crossing of the Antarctic continent over the South Pole. This journey began on November 24 last and finished on March 2. Meanwhile from the other side Sir Edmund Hillary and his Support Party had set out.

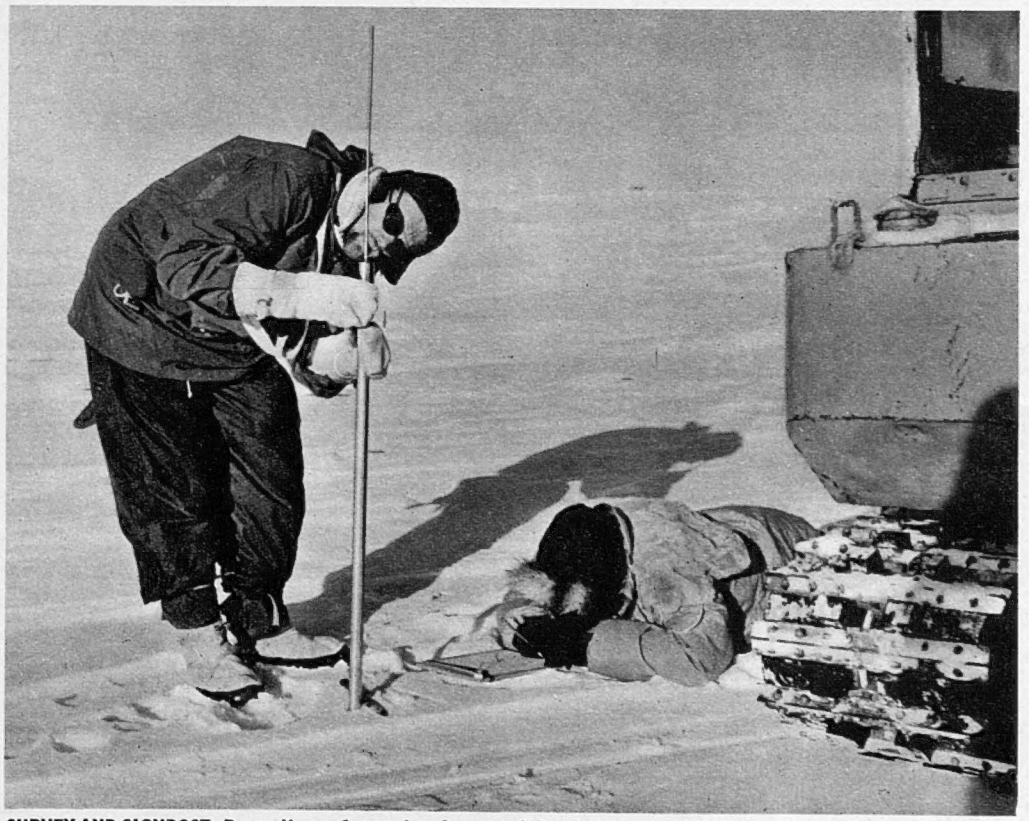


A HALT FOR REFRESHMENT ON THE POLAR PLATEAU: Jon Stephenson, the expedition's geologist, sits on a sledge and drinks from a flask. Close to him dogs are resting and beyond are some of the tracked vehicles. The trans-Polar explorers carried a wide variety of Commonwealth flags. Among them was that used by William Bruce on the National Scottish Antarctic Expedition of 1901-1903.



THE FIRST OBSTACLE: The picture taken from the air shows the grim outline of the Theron mountains standing out against the surround of snow. The range to the south of Shackleton Base contains coal and anthracite deposits and was the first major obstacle which the explorers had to pass heading for South Ice.





SURVEY AND SIGNPOST: Recordings of snow hardness and density are made by David Pratt, the senior engineer, and Hal Lister, the glaciologist. *On left*—Vehicles are parked by a tent below a snow cairn, one of many set up by the dog party which at this stage was going ahead to signpost the route for the tractors.

SUNSHINE ON SNOW AND THE SOUTHERN LIGHTS: ***Above*****—The aerial view is of a glacier in the Shackleton Range looking down on to the ice and snow on the route between Shackleton Base and South Ice.** A high point was reached over this glacier by four members of the trans-Polar party in a climb from their camp two miles from the western end of the range in December. From there Dr. Fuchs and his team moved through extremely hard going over glaciers and ice walls to South Ice, reached at Christmas. *On right*—The *Aurora Australis* seen to the south-west of Shackleton Base towards the end of April. The Southern Lights are the Antarctic version of the Arctic *Aurora Borealis*. The Antarctic winter begins in late March and mid-winter is in mid-June. The sun should shine below the horizon in August. Summer and the exploring season start in October.

Trans-Antarctic Epic

THE POLAR SUMMER AND WINTER

THE NEWS IN PICTURES

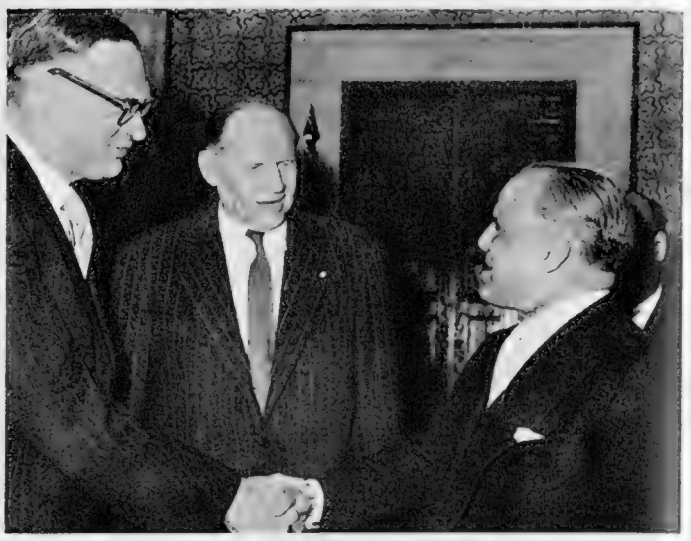
A SON AND HEIR FOR THE PRINCE OF MONACO: *Left*—A salute of 101 guns is fired in the Principality in celebration of the birth of a boy to Prince Rainier and Princess Grace. The child, who is to be christened Albert Alexandre Louise Pierre, automatically takes precedence over his sister, Princess Caroline, and becomes heir to the throne. *Right*—After the announcement from the Palace, Prince Rainier carries Princess Caroline to the balcony and waves to the crowd assembled below. Princess Caroline was born in January of last year. The first news of the birth of Prince Albert was given by a young woman from a window in the Palace. She called out "It's a boy, it's a boy." A little later the salute was fired and Prince Rainier broadcast to his people. He spoke of his "emotion and very great joy" at the birth of his son. The flags of Monaco and the United States were soon displayed in the city and crowds of people made their way to the Palace. The following day was declared a holiday for schoolchildren and for public servants.

OUTSIDE THE ROYAL PALACE OF MONACO: Citizens wave and cheer as Prince Rainier carries Princess Caroline to the balcony. Rejoicing in the city went on throughout the day and night. During the day Princess Grace spoke over the telephone to her father, Mr. John B. Kelly, in the U.S.A. Mrs. Kelly is in Monaco.

A ROYAL MARRIAGE DISSOLVED: Queen Soraya (left) is seen with her mother in Germany after the announcement of the dissolution, in Teheran, of her childless marriage with the Shah of Persia. The Queen has been staying with her father, who is the Persian Ambassador in Bonn. In Teheran, the announcement of the divorce stated that the council of Royal Privy Counsellors strongly and unanimously advised the Shah that the heir to the throne must be a direct offspring of the present monarch. They also declared that the appointment of a Crown Prince was necessary, "to safeguard the interests of the nation and the monarchy, and to avoid unrest and confusion." The Shah has expressed his "deep sorrow" at the divorce. Queen Soraya, who married the Shah seven years ago, consented to the separation "with my deepest regret," and "in the interest of the future of the State and of the welfare of the people."

THE NEWS IN PICTURES

A DEMONSTRATION BY ANOTHER FRENCH CIVIL SERVICE: The scene in the courtyard of the Police Prefecture in Paris when the Paris Police Force demonstrated for an increase in salary. Part of their indignation arose from their desire to obtain "danger bonuses" against risks imposed by North African terrorists in the city. The Government undertook to provide such a bonus on February 25 and the police now claim the commitment has not been met. They also want an increase in their starting salary from 39,000 francs (about £32 10s.) to 43,000 francs (£36) a month. Thus the protest may be regarded as in line with the numerous demonstrations staged by French civil servants in recent months.



"GOOD OFFICES" CONFERENCE IN TUNIS: President Bourguiba of Tunisia shakes hands with Mr. Harold Beeley, of the British Foreign Office. With Mr. James Murphy (behind), of the American State Department, Mr. Beeley was about to have talks with the President regarding the possible use of Anglo-American good offices in the dispute between France and Tunisia. Previously they have been in Paris. At the beginning of this week there was little optimism about the outcome of their mission. In Tunisia anti-French enthusiasm was being whipped up at the approach of National Independence Day (Thursday, March 20). In Paris M. Gaillard was publicly still maintaining an intransigent attitude, although it was believed that he was fully aware of the horror evoked by recent allegations of torture by French parachutists in Algeria.

HIDDEN IN THE WOODS NEAR ALDERSHOT: An American-built Corporal rocket towers amid the treetops in a wood near Aldershot, as it is prepared by the men of Britain's first Guided Weapons Regiment, which is commanded by Lieut.-Colonel J. E. Cordingley. To set up and fire such a missile necessitates the entire regiment, with a complement of 500, being brought into action. The Corporal, which is 45 ft. in length, was developed by the Jet Propulsion Laboratory at Pasadena, California. To fire one in Britain requires eleven trucks, including one to carry the atomic warhead and the carrier erector.

BOOS AND CHEERS FOR MR. DE VALERA: The Prime Minister of Eire is being presented with a sprig of shamrock for St. Patrick's Day by an Irish air hostess on arrival at London Airport from Dublin. He had flown to London to attend a St. Patrick's Day dinner. When arriving to attend Mass at St. Patrick's Church, Soho Square, a large crowd started cheering and booing. There were shouts of "What about the men in the Curragh?" (The Curragh is a camp for political internees.)

THE DEATH OF A NOTED LONDON PUBLISHER: Mr. Michael Joseph died last Saturday after a short illness. Aged sixty, he was the Chairman and Managing Director of the publishing firm which bears his name and which he launched twenty-two years ago next month. In a few years he had a most impressive list of authors and among the writers who have long been associated with his imprint are H. E. Bates and C. S. Forrester. Richard Gordon, of the best-selling "Doctor" series, was one of his discoveries. Mr. Joseph was also an author in his own right, his books including *Short Story Writing for Profit*, *The Adventure of Publishing* and some charming volumes about cats. Before becoming a publisher he was a director of a literary agency. In the First World War he served with the Wiltshire Regiment and the Machine-Gun Corps.

THE NEWS IN PICTURES

A NEW BELGIAN SENATOR IS SWORN IN: At the Palais de la Nation, in Brussels, Prince Albert raises his hand to take the oath flanked by Senator Mullie (in background) and Senator Bouilly. The Prince is the brother of King Baudouin and heir presumptive to the throne. He is twenty-three years of age. The Senate is one of the two chambers of the legislature of Belgium. Some of its 175 members are directly elected, others are indirectly elected (or co-opted).

THE DUKE OF EDINBURGH DRIVES A TANK: He is about to jump down from the camouflaged Centurion which he had driven on Lüneburg Heath, in West Germany, during a visit to the King's Royal Irish Hussars. Prince Philip is Colonel of the regiment. Immediately behind him is Sergeant George Beattie, the tank's commander. It was reported that the Prince had some slight trouble on Victory Hill when he missed a gear and the armoured vehicle began to slip backwards. However, with advice from the sergeant, he soon had the tank moving forward again.

MINISTER FIGHTS A DUEL: Dr. Jorge Fernandez Stoll (on right), Minister of Interior in the Peruvian Government, attacks Senator Wilson Sologuren, in a duel in Lima. The Minister had challenged the Senator to give him satisfaction with sabres because of a letter published by the latter. Dr. Stoll was reported to have been the more skilful duellist.

On left—

SOUTH-EAST ASIA MILITARY TALKS: General Alfonso Arellano (left), the Philippines Military Adviser, and Commodore Razhid, Head of the Pakistan delegation, compare notes during the South-East Asia Military Advisers' Conference in Manila. The meetings preceded the S.E.A.T.O. Council Conference there last week.

BULLETS FLY IN LIMA: Three policemen carry Dr. Enrique Cipriani, the Leader of the Christian Democrat Party, to an ambulance after he had been wounded by a bullet during a demonstration staged by his party in the capital of Peru. The object of the gathering was to protest against a Government decision regarding political demonstrations. A clash with the police ensued.

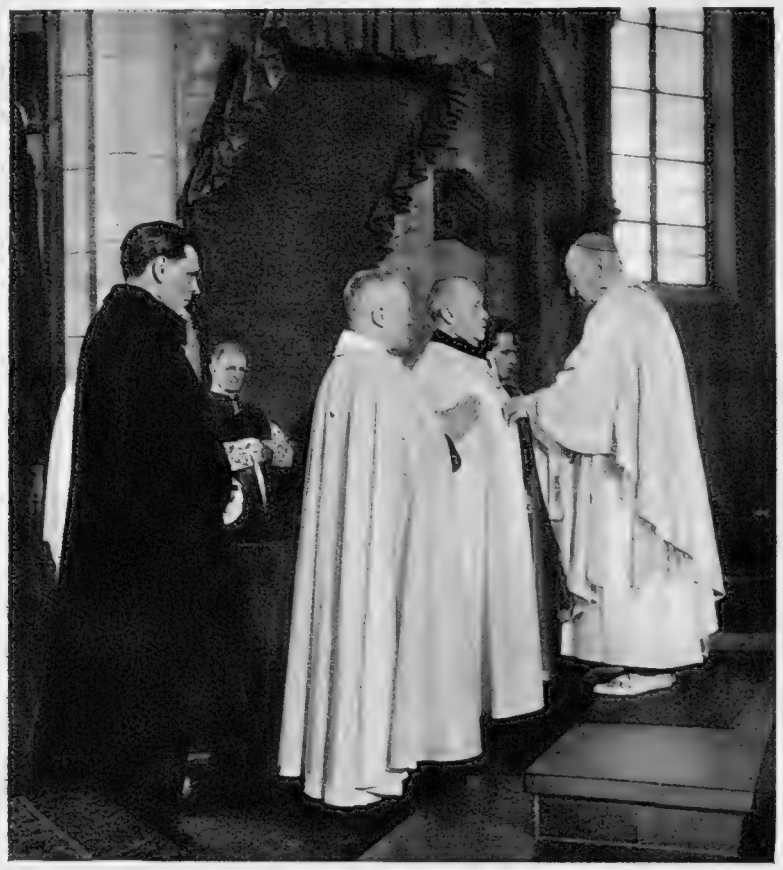
THE ANNUAL BLESSING OF MOTOR-CARS IN ROME: Bishop Luigi Traglia, standing behind the sacred banner hanging from the railings above the wall in the centre of the picture, gives his blessing on the cars lined below. Every year, on the Feast of St. Francesca Romana (March 9), cars gather near the church in Rome dedicated to her memory for the ceremony of the benediction. St. Francesca Romana (1384-1440) was canonised in 1608 and is the patron saint of motorists.

THE NEWS IN PICTURES

SPILLS AT CHELTENHAM: *Above*—P. G. Madden comes to grief after his mount, Owen's Image, fell at the first hurdle in the Champion Hurdle at the recent Cheltenham meeting. *Right*—Jockey J. R. Cox struggles to free his feet from the stirrups after his mount Ernest took a heavy fall at the second fence while taking part in the National Hunt Steeplechase. The winner of the Champion Hurdle was Bandalore, trained by Mr. Stanley Wright and ridden by Mr. G. Slack. It was the second year in succession that a horse trained on the borders of England and Wales won the event. The result was rather unexpected in racing circles, for Bandalore had been either unplaced or beaten in a number of races earlier in the season. It was the first time Mr. Wright had had a runner in the Champion Hurdle and it was his first winner at the National Hunt Meeting. The going in the National Hunt steeplechase was somewhat hindered due to the race being run in heavy snow which spoilt it for both riders and spectators. It was won by Mrs. T. Dun's Spud Tamson. Throughout the race the horse ran strongly and passed the post ten lengths in front of his nearest rival.

On right—

WEST GERMAN CHANCELLOR KNIGHTED BY CHURCH: Dr. Konrad Adenauer, the West German Chancellor (the centre of the three white-cloaked figures), is seen with Dr. P. Marian Tumler (right) during his recent investiture as an honorary knight in the 800-year-old Teutonic Order at St. Andreas Catholic Church in Cologne. The Order is bestowed by the Catholic Church on outstanding civic leaders. It has only twelve knights, five of whom are German. Among those at the ceremony was Herr Julius Raab, the Austrian Chancellor, who received the honour last year.



ARCHBISHOP MAKARIOS MEETS THE NEW GREEK PREMIER: The exiled Archbishop is seen with Mr. Constantine Georgakapoulos, the new Prime Minister of the Greek Caretaker Government, at the Political Office in Athens. During their meeting, the new Premier talked to the Archbishop about the situation in Cyprus. Three days before their meeting Mr. Georgakapoulos had succeeded Mr. Karamanlis as Premier.

OPENING OF NEW NAIROBI AIRPORT: A view of the new airport at Embakasi, taken from the control tower, showing visitors arriving for the opening ceremony and looking at an R.A.F. Venom fighter, two Vulcan bombers and a B.O.A.C. Comet II, which later took part in a flying display. The airport was declared open by Sir Evelyn Baring, Governor of Kenya, in a ceremony which was originally to have been performed by the Queen Mother on the journey home to Britain from her recent tour of Australia.

THE LAUNCH OF A COASTAL MINESWEEPER: H.M.S. *Crofton* enters the waters at the Woolston, Southampton, yard of John I. Thornycroft and Co. Ltd., after a ceremony performed by Mrs. Woodifield, wife of Captain Anthony Woodifield, M.V.O., R.N., the Secretary to the Controller of the Navy. The ship is the thirteenth coastal minesweeper to be built by Thornycroft's. Her construction incorporates the use of aluminium both for the framing and structural castings, the outer bottom being wood planked.

SKI RACE IN SCOTLAND

An Annual Event for Winter Sports Teams on the Snows of Glen Shee, in the Highlands

Winter sports must necessarily depend on the weather. Even the most renowned centre of Europe can suffer a lean season if snowfalls are unexpectedly light. On the other hand, snow in sufficiency anywhere can bring out skis and toboggans. Given the right conditions London's Hampstead Heath, and areas even further south in England, can become miniature replicas of Davos or Kitzbühel.

Such occasions are rare in England. One of the few parts of the United Kingdom which can hope to have regular winter sports is the Highlands of Scotland. In the past few years ski-ing has become increasingly popular there.

One of the major ski-ing events in Scotland is the Inter-City Relay Race for the Tennent Trophy, which is organised by the Scottish Ski Club. It is held annually in March and this year the venue was Glen Shee. For a few days before the arranged date there was considerable anxiety because there was a shortage of snow. Cold spells had been followed by thaws and the hills were bare of their white covering. Then the weather made amends. Snow fell so thick and fast that some intending competitors were unable to reach the course. Others only arrived by pushing cars and buses through snowdrifts.

Under its rules the race is open to teams of six, each made up of four men and two women. The competitors this month came from many cities, among them Edinburgh, Glasgow, Dundee, Aberdeen, Perth and Stirling. They arrived in Polar conditions of "white-out" in which Dr. Fuchs would have felt at home, the fierce wind driving the snow on to the hill up which the skiers had to struggle to reach the start. The route followed a fence climbing to a ski hut on Beinn Gulabin, 2,641 ft. high at its summit. From the hut an improvised ski-lift carried the competitors to the start. This lift was simple and ingenious. At the bottom of the hill a rope was run through a pulley to a farm tractor at the top. The tractor provided the power by which the rope was drawn upwards. The skiers hung on to it and were hauled to their destination.

Just before the race was due to begin the weather changed. The wind dropped, the clouds disappeared, the sun came out and snow-clad peaks glinted under blue skies. Conditions could not have been better.

The snow surface of the downhill course, which dropped 400 ft., was soon packed down by the skis of the many entrants, speeding and turning between the flags. It became apparent that victory was going to be a close-run thing between Perth and Dundee and eventually Dundee won after some very fine ski-ing by both teams.

The next big Scottish ski-ing meeting is being held in Glen Coe next month during Easter. It is generally regarded as the most important event in the Scottish ski-ing calendar and entries are expected from far outside Scotland itself, some competitors coming from abroad.

AN IMPROVISED SKI-LIFT: The skier in the foreground is being pulled up Glen Shee, in the Highlands, on a rope. Power for the lift comes from a farm tractor on the top of the hill, the rope being run through a pulley at the bottom of the slope. The sportsman grabs it and is pulled up to the start of the Scottish Ski Club's annual Inter-City Relay Race for the Tennent Trophy.

On left—

THE FINISH: The flags mark the end of the race. In the background are the snow-covered slopes of Glen Shee. Teams from many cities, including Glasgow, Edinburgh, Aberdeen, Dundee, Stirling and Perth, competed this year. Dundee won.

Below—

CORNERING IN STYLE: Dr. James Kerr, of Glasgow, comes sweeping down to a flag marking a turning point. His team started off in good style but unfortunately one of the members lost a ski and had to retire.

THE NEW LONDON AND THE OLD

In the City, Marked Progress is Being Made on the Erection of Vast New Buildings; Across the Water at London Bridge a Narrow Viaduct Causes a Bottleneck

On right—

IN THE SHADOW OF ST. PAUL'S CATHEDRAL: The camera looks down on the scene just beyond the east end of London's Cathedral where a vast programme of rebuilding is still under way. On the left of the picture is the completed Gateway House, the headquarters of the Wiggins Teape Group, and immediately opposite, on the other side of the road, is the partly erected new *Financial Times* building. Nearer the camera, on the right, work is in progress on the erection of another building which is to be known as Old Change House. Away in the centre background is the roof of Cannon Street Station.

Below—

THE APPROACH TO ONE OF LONDON'S MAIN RAILWAY STATIONS: The goods train is crossing the narrow viaduct which carries the line of the Southern Region of British Railways into London Bridge Station. As eighty-eight passenger trains have to pass across the viaduct in a rush hour, trains are subject to delay. This is particularly the case when trains have been delayed further down the line and are more or less "queuing" to enter the station. It is impossible to widen the viaduct—at least at this stage. The viaduct was built in 1864. Dominating the scene in the left background of the picture is Tower Bridge.

TRANSFORMATION IN THE CITY OF LONDON—AN ASPECT OF THE VAST REBUILDING PROGRAMME: This general view, taken from the top of St. Paul's, gives a good impression of some of the building work which has been undertaken (and is still under way) in the vicinity of the Cathedral. Prominent in foreground is St. Paul's garden, which was one of the City of London's contributions to the 1951 Festival of Britain. To the left is the tower of the bomb-damaged church of St. Augustine, which will eventually form part of the new buildings for the Cathedral Choir School in the Cathedral precincts. In the centre, from the left, are: part of the new offices for the Bank of England; Gateway House, with its pleasant lawn running along one side of the building on the Cannon Street frontage; the new *Financial Times* building, and (slightly nearer the camera) Old Change House. Towering in the left background is the fourteen-storey building known as Bucklersbury House, which stands on the site of the Roman temple of Mithras. It is London's biggest office block.

On right—

PANORAMA OF THE NEW LONDON SKYLINE: In this extensive view the camera looks north-east from the Cathedral across Cheapside. In the foreground, work is in progress on another section of the new offices for the Bank of England, and to the left and right a number of other new buildings are in varying stages of construction. The funnel-like feature at the top of the building, towards the right background, is the core of the new steeple of the church of St. Mary-le-Bow, in Cheapside, which is being restored. The cylinder is a support for the new spire to replace the old one which was pulled down. The tower of the steeple was left standing after the church had been gutted by bombing in 1941.

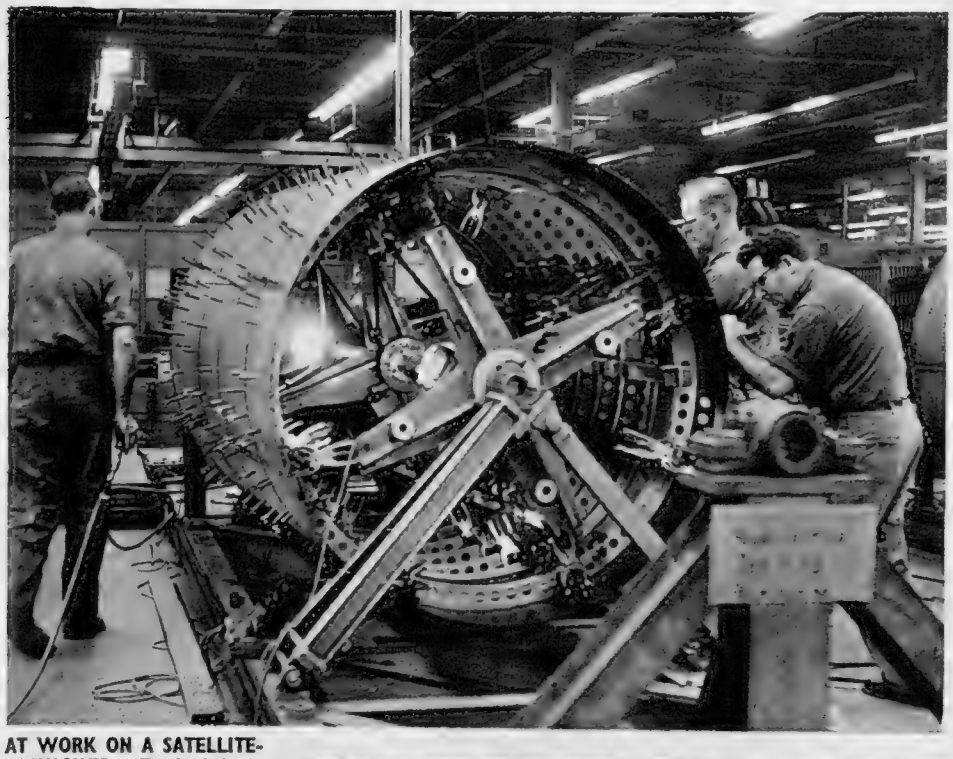
THE BURNT-OUT SHELL OF THE SMITHFIELD POULTRY MARKET: Rubble and debris lie on the ground below the girders in the gutted remains of the building, which was destroyed by fire at the end of last January. The fire was discovered early in the morning and as the day progressed it spread through a labyrinth of cellars and tunnels over an area of 2½ acres. It was described as one of the worst subterranean blazes ever known in London. Two firemen died fighting the flames, being suffocated in the smoke-filled underground passages. They were Station officer Jack Fourt-Wells and Fireman Richard Stocking. Some forty firemen were injured, eight of them being taken to hospital suffering from the effects of smoke, before the fire was brought under control. Thousands of gallons of water were pumped into the cellars.

RUINS AND DEMOLITIONS

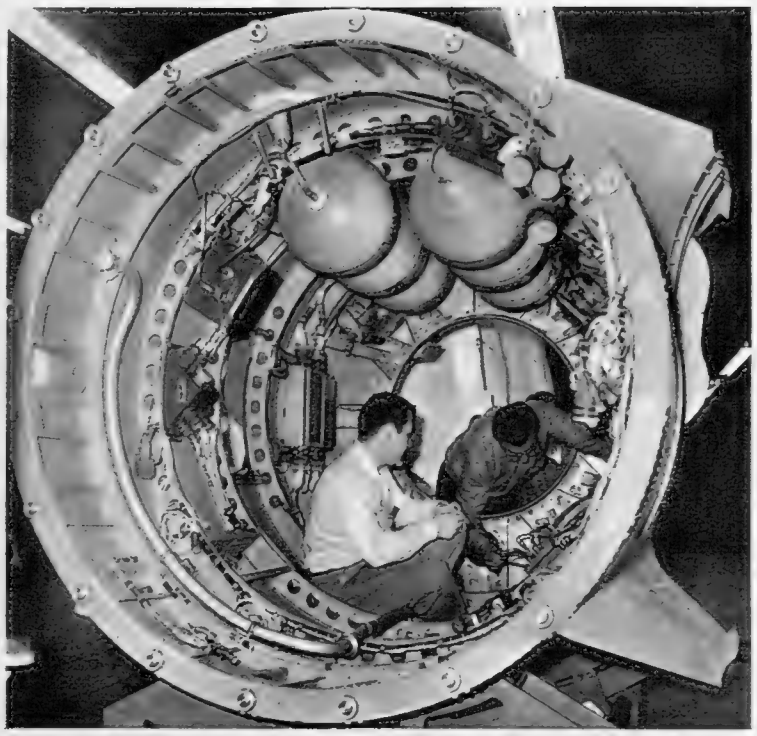
After the Smithfield Fire; Pulling Down Houses and Theatres in London

TWO THEATRES DISAPPEAR FROM THE LONDON SCENE: The demolition is nearly finished of the New Cross Empire, once a famous music hall in South-East London. It was closed in 1954 and for two years used as a studio for television. Now a petrol station is to be built on the site. One memory of the old Empire will remain—a large wrought-iron sign which will be erected on the roof. *On right*—The façade of the old Grand Theatre, at the Fulham end of Putney Bridge, will soon come down, much of the building having been already demolished. The theatre was opened in 1897 and in 1933 it became the "Shilling Theatre," a shilling being the maximum price for a seat. In 1934 it was closed and has since been used as a storage depot. A large block of offices, which is to be known as Putney Bridge House, will take its place.

A LAST STAND: The house in Prince's Gate, in Kensington, London, is the sole survivor of a number of dwellings which have been pulled down to make way for a block of flats. It is reported that the occupier, an eighty-four-year-old widow, has refused to leave. The landlord and the company building the flats have agreed that she shall keep her home.



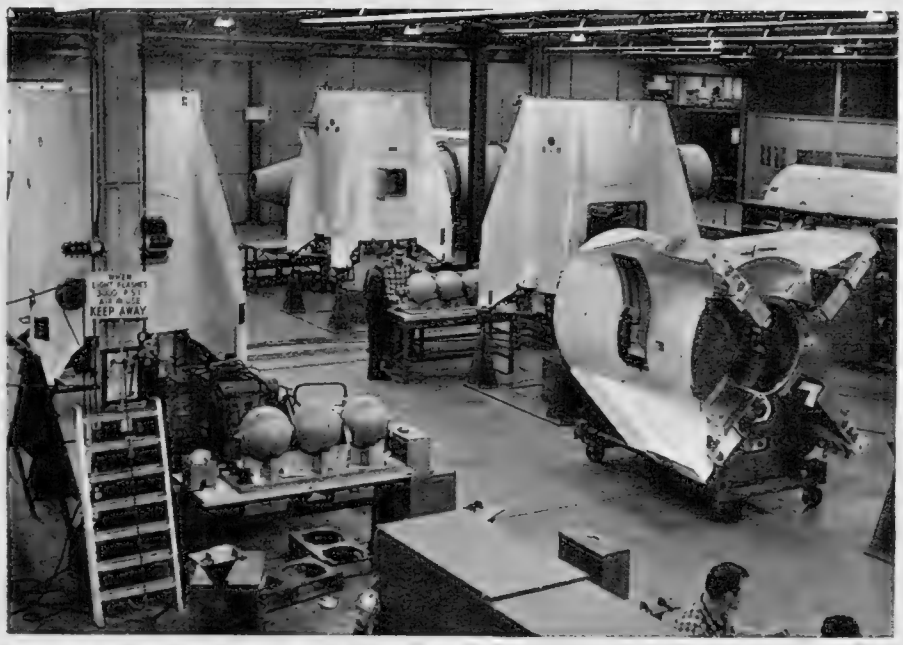
AT WORK ON A SATELLITE-LAUNCHER: Technicians at the Chrysler Army Missile Plant, near Detroit, are engaged on assembling the mid-section of a Redstone ballistic missile. It was a modified version of a Redstone which formed the first stage of the Jupiter-C rocket that fired the United States satellite, Explorer I, into orbit on January 31. The missile has a range of 250 miles.

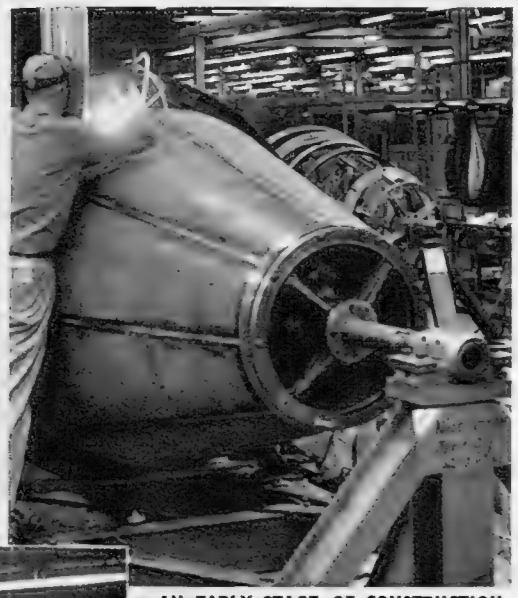


INSIDE THE SHELL: Engineers are installing electrical equipment in the tail section of one of the ballistic missiles. This equipment plays a major part in controlling the rocket's flight. The balls at the top are high-pressure air tanks.

On right—

THE TAILS TAKE SHAPE: The tail sections of Redstones are seen in one of the main assembly rooms at the Chrysler Army Missile Plant where the manufacture of such missiles has been going on for the last three years. The Redstone is the largest of the American ballistic missiles.





AN EARLY STAGE OF CONSTRUCTION: A welder is joining the nose to the aft section of a Redstone. The missile, which is nearly 70 ft. in length and 6 ft. in diameter, normally has a range of about 250 miles.

EXPLORING SPACE

Preparations and Tests During the Assembly of a Satellite Launcher

On left—

THE FINAL PHASE: Inside the top-security final testing area at the plant the missile undergoes its most important ground test. Hydraulic, air pressure and electrical systems must be found to be absolutely perfect before transportation to launching bases.

The building of Redstone ballistic missiles at the Chrysler Army Missile Plant at Detroit is a long and exacting process in which the basic principles of aircraft building are adopted, the utmost care being given to each stage of manufacture. The finest scientific, technical and engineering skill available in America to-day is employed in their manufacture.

On January 31 the first American earth satellite was launched at Cape Canaveral, Florida. Mounted on a Jupiter-C rocket, the Explorer satellite ascended into orbit and began its circling of the world at 18,000 miles per hour.

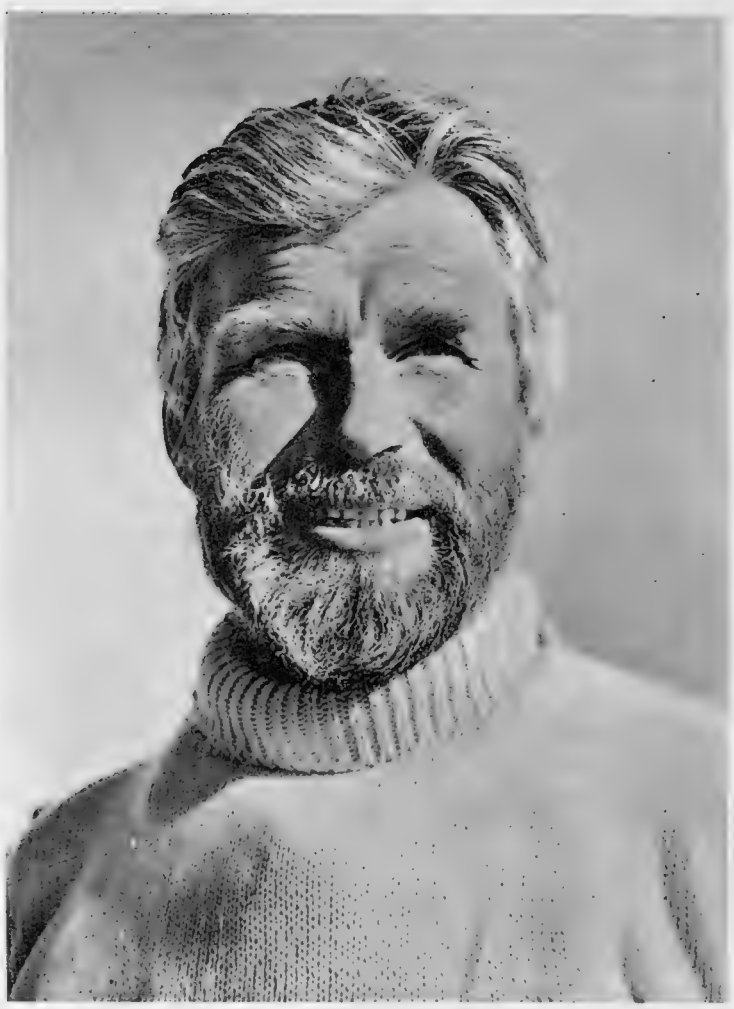
The rocket was developed jointly by the Army Ballistic Missile Agency, Huntsville, Alabama, commanded by Major-General J. B. Medaris, and the Jet Propulsion Laboratory of the California Institute of Technology, whose director is William H. Pickering. Leading the team of scientists on the satellite project was Dr. Wernher von Braun, who worked on the German V2 rocket during the war. ABMA was responsible for the first stage of the Jupiter-C, which was powered by the well-tried Redstone Ballistic Missile engine, and is a liquid propellent power plant. The upper stages are furnished by JPL and fuelled by solid propellents.

The Redstone rocket engine which lifted the satellite off the ground exerted a 75,000-lb. thrust on the missile which had a total weight of about 65,000 lb. A new type of fuel, known as hidyne, was used instead of alcohol, the normal Redstone fuel. The first stage was discarded at a height of 53 miles, 145 seconds after the launching took place. The three other stages, consisting of clusters of small solid-propellent rockets, coasted on up to an altitude of about 212 miles.

As they coasted up these final three stages, they gradually formed an arc until they were aimed parallel with the earth's surface. At this point, some 405 seconds after the take-off, a remote control button was pushed on the ground, firing the three stages in rapid succession and accelerating the satellite to the orbital speed of 18,000 miles an hour. The Explorer then went racing off into space, whirling rapidly at a rate of about 700 revolutions per minute. Three or four of the satellite's twelve exterior erosion gauges broke during the take-off, but the cause of this occurrence is a matter of speculation.

Redstone ballistic missiles have been in production for the last three years. Their development, under the supervision of Dr. Wernher von Braun, was a basic step towards the newer Jupiter intermediate-range ballistic weapon.

THE REALISATION OF ONE OF THE MOST DIFFICULT PROJECTS EVER CONCEIVED IN EXPLORATION: The thick broken line on the map is the route taken by Dr. Vivian Fuchs from Shackleton Base over the South Pole to Scott Base. It was the course proposed by Sir Ernest Shackleton for his ill-fated trans-Antarctic expedition over forty years ago. Sir Edmund Hillary's route from Scott Base to the Pole was also along the thick line. Four parties have now reached the Pole by land, the other two being led by Amundsen and Scott, both from the Ross Sea area. The American Byrd was the first to fly to the Pole and the present American station was established there by air. Another important Antarctic station is the Russian headquarters at Mirny. The small map shows territorial claims made on Antarctica, but plans are now being propounded for international control of the continent.



TRANS-ANTARCTIC EPIC

The Historic Journey of the Commonwealth Trans-Antarctic Expedition

By E. A. A. SHACKLETON

DRAWINGS by VICTOR COVERLEY-PRICE

THE last of the great geographical journeys on earth has been completed. In this century the Poles, Everest and the land crossing of the Antarctic continent have been the principal objectives for land explorers. All have now been attained. Dr. Fuchs travelled over 2,000 miles in 99 days from the Weddell Sea to McMurdo Sound.

On left—
THE LEADER OF THE EXPEDITION: Dr. Vivian Fuchs reached his fiftieth birthday towards the end of his Polar crossing. Educated at Brighton College and at St. John's College, Cambridge, he began exploring as a geologist in Greenland in 1929. Since then he has been on expeditions to areas as widely different as Africa and Antarctica. For his leadership of the Trans-Polar party he is to be knighted.

The Trans-Polar crossing right through the heart of the Antarctic has been an old dream of geographers. As long ago as the first decade of this century the Scottish geographer Dr. Murray put forward a proposal for such an enterprise. The German explorer Filchner made plans to undertake it, and in 1914 my father, Sir Ernest Shackleton, embarked upon the Imperial Trans-Antarctic Expedition. The hopes of this expedition foundered amid the grinding pack-ice of the Weddell Sea. Shackleton's ship, *Endurance*, was crushed and the return to civilisation of these men many months later is to-day an epic.

While Shackleton strove to lead his men to safety on the Weddell Sea side, that great Polar traveller Joyce was laying depots from the Ross Sea side deep into the Antarctic, intended for the use of the party crossing from the Weddell Sea.

A HISTORIC DAY IN THE HISTORY OF POLAR EXPLORATION : The artist has drawn his impression of the scene on November 24, 1957, as the Fuchs party set out from Shackleton Base at Vahsel Bay, on the Weddell Sea. The vehicles consisted of four Sno-cats, three Weasels and a Muskeg. Dogs also had a vital part in the journey as far as the Pole. Before the explorers were the appalling hazards of ice and snow for 2,150 miles before they would reach the coast on the far side of Antarctica.

DIGGING OUT AT SHACKLETON BASE—A NORMAL PART OF THE DAY'S WORK IN ANTARCTICA : Dr. Fuchs handles a shovel to clear snow so that the tractor can proceed. The picture was taken at an early stage of the expedition when stores were being dragged across the ice to Shackleton Base. Before starting on the main journey, Dr. Fuchs led a reconnaissance across the ice-shelf and mountains to South Ice, pioneering on what was correctly anticipated would be the hardest part of the whole crossing.

To-day more than forty years later, substantially the same plans have been successfully carried out with Fuchs advancing from Shackleton's chosen base (named after him) to meet Hillary in the same role as Joyce operating from Scott Base on the Ross Sea side. The journey may have been easier than it would have been forty years ago, but despite all the modern aids it has none the less been as hard and dangerous as any undertaking in modern times.

In some ways it has been a text-book operation, comparable with Montgomery's advance from Alamein to Tripoli. It was planned to the highest degree, equipped with the most modern transport and with good air support. Yet in the last result victory depended, as in the desert war, on superb tactical skill, high technical efficiency, steadfastness, endurance and courage. These qualities have never been lacking in Polar explorers. They are certainly not lacking in Dr. Fuchs and his men. Perhaps the most striking aspect of this expedition has been its total success, of a kind that has rarely, if ever, been so complete in the annals of Polar exploration. For not only has a great journey of geographical importance been successfully carried out, but scientific work of high quality was sustained throughout the entire journey.

The story first looked like becoming a reality when Dr. Fuchs obtained a promise of a grant of £100,000 from the British Government. Thereafter grants from other Commonwealth Governments and a wide range of public and private sources swelled the total so that to-day it is not impossibly short of the £500,000 needed. But, like all expeditions, it had to set out with much of the funds lacking and only faith to sustain it.

In November 1955 the *Theron* sailed from St. Katherine's Dock, London, port of departure for so many expeditions. On board were the eight members of the advance party bound for the Weddell Sea, together with Dr. Fuchs, leader of the whole Commonwealth Trans-Antarctic Expedition, and Sir Edmund Hillary, who was to lead the subsidiary Ross Sea party from McMurdo Sound. Two parties were the essence of the plan.

The *Theron*, like the *Endurance*, was heavily beset in the Weddell Sea, and did not arrive to set up the base near Vahsel Bay before the end of January 1956. A race with the winter and the threatening pack-ice of the Weddell Sea ended when the *Theron* was forced to sail, having successfully unloaded the essential stores. Much of this vital equipment was still in a dangerous situation.

A little later many of the stores drifted out to sea on breaking ice. The advance party were to spend as hard a winter as any Polar expedition has done in recent years. Their winter hut was incomplete, and they lived in tents and a large packing-case which had housed the Sno-cat.

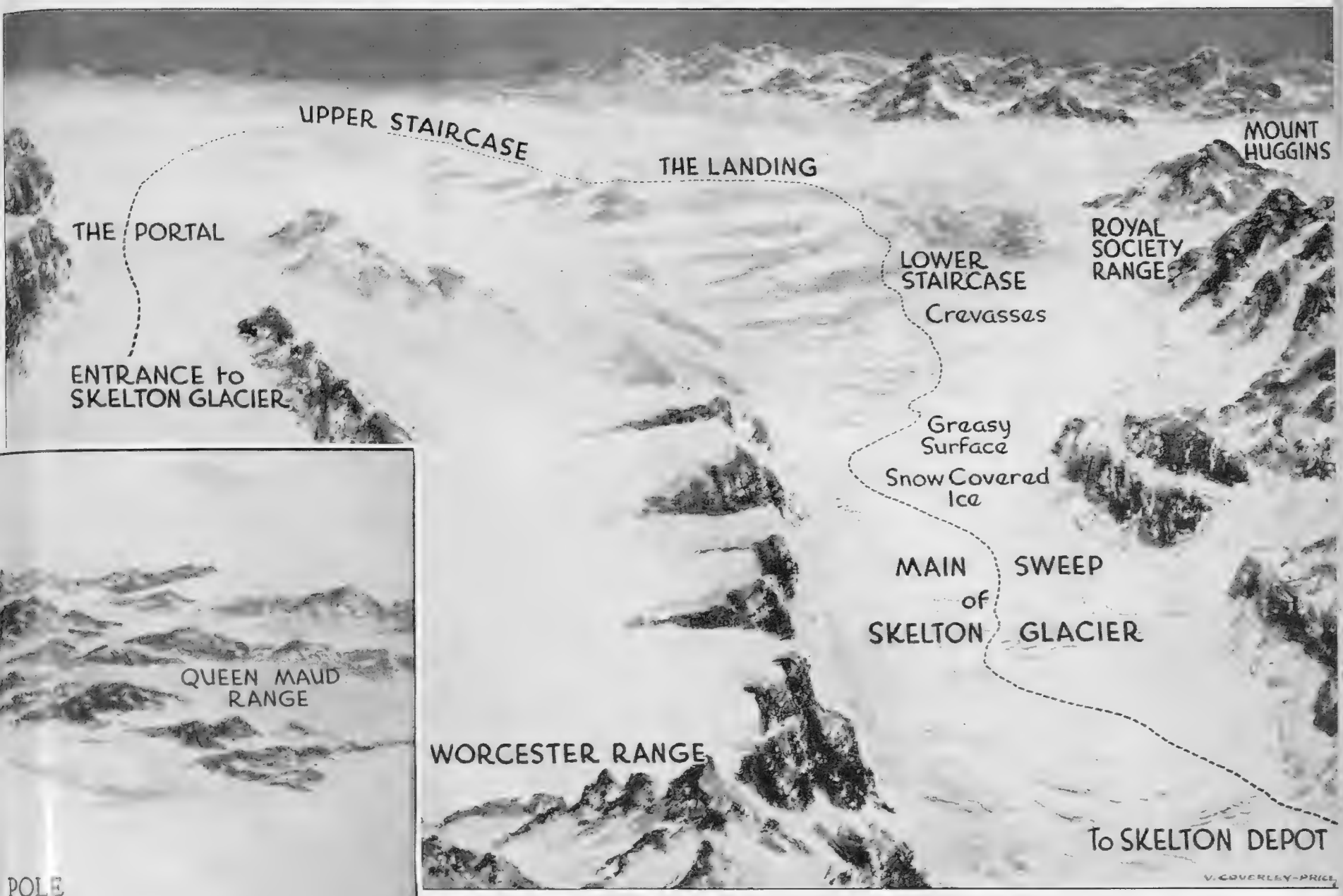
None the less, they successfully carried out much of the task they had been set to do, and preliminary reconnaissance for Dr. Fuchs' southern journey was undertaken. Meanwhile, the *Theron* arrived back in England with Fuchs and Hillary, and both the main expeditions set-to in earnest. Hillary carried out the equipping and training of the New Zealand Expedition in the Alps of

(*Continued on page 466*)

TRANS-ANTARCTIC EPIC

DIARY OF THE POLAR JOURNEY

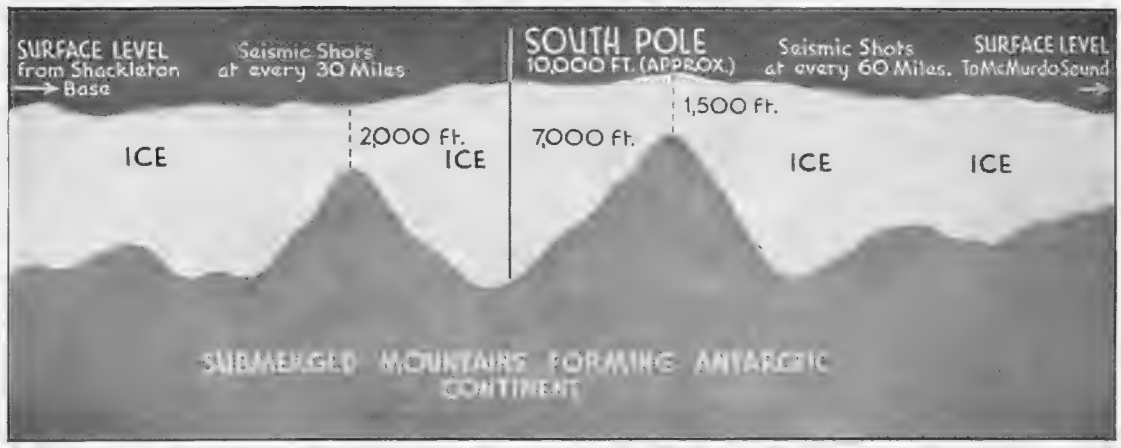
November 24, 1957 : Start from Shackleton Base.
November 28 : *25 miles on. Some trouble with crevasses.*
November 30 : *50 miles on. Passing Theron Range.*
December 2 : *Sno-cat jammed over crevasse. Towed clear.*
December 3 : *A very good day's run—65 miles.*
December 8 : *Vehicle in crevasse below ice wall.*
December 10 : *200 miles on.*
December 18 : *Hard* sastrugi (*hard-packed snow ridges shaped by the wind*) *encountered. Over 20 miles of ice wall with 1 in 10 gradient to Recovery Glacier. Four bad crevasses negotiated. Travelling at night to take advantage of harder snow surfaces.*
December 24 : *Through the Nunataks to South Ice. 375 miles from Shackleton Base. Vehicles serviced. 575 miles to go to Pole.*
December 27 : *Weasel tractors giving trouble and causing delay on Polar Plateau.*
December 28 : *Vehicles repaired. Run of 15 miles.*
December 31: *U.S. plane drops supplies.*
January 4, 1958 : *357 miles from Pole. Muskeg tractor abandoned according to plan. Very heavy going, sledges crashing over precipitous places and causing damage to tractors. But average progress of 20 miles a day maintained.*
January 7 : *Poor visibility but surface improved after 67 miles of high* sastrugi.
January 10 : *230 miles from Pole. Stop for vehicle maintenance after four daily runs each of 30 miles over slightly easier conditions.*
January 12 : *Delay from heavy snowdrifts.*
January 14 : *140 miles. Halt for repairs. Dogs keeping up with vehicles.*
January 15 : *One Weasel tractor abandoned.*
January 16 : *85 miles to go to Pole.*
January 19 : Arrival at South Pole. *Welcome to Hillary and American scientists. Arrangements made for flying dog teams to McMurdo Sound.*
January 24 : *Departure from Pole on second half of journey to Scott Base. 25 miles covered before camping.*
January 26 : *80 miles from Pole through partial white-out with a 15- to 20-knot following wind. Fuchs reported "going strong."*
January 28 : *Geoffrey Pratt taken ill with carbon monoxide poisoning. Oxygen mask and emergency equipment dropped for him by an American aircraft. Drifting snow, visibility bad, sometimes at zero.*
January 30 : *Halfway to Depot 700. Weasel tractor abandoned.*
February 7 : *At Depot 700. Hillary's flight from Scott Base held up because of bad weather.*
February 8 : *Trouble among crevasses about 30 miles north of Depot 700. Two Sno-Cats in crevasses. Repairs needed to steering of one.*
February 10 : *Hillary reaches the party.*
February 13 : *Halfway between Pole and Scott Base.*
February 18 : *Depot 480 reached.*
February 21 : *80 miles from Depot 480. Difficult weather with cloud and white-out conditions. Men moving ahead of vehicles to probe surface.*
February 23 : *At Plateau Depot at the entrance to the Skelton Glacier. 280 miles to go to Scott Base.*
February 24 : *Descent begun of Skelton Glacier down the Upper Staircase. Explorers among mountains after two months on the Polar Plateau.*
February 25 : *Along the Landing and down the Lower Staircase to the main glacier.*
February 27 : *Departure from Skelton Depot on last 180 miles.*
March 2 : Arrival at Scott Base and the end of the epic 2,150-mile journey in 99 days.



THE ROUTE OF THE COMMONWEALTH TRANS-ANTARCTIC EXPEDITION'S HISTORIC TREK OF 2,150 MILES: Across the page *on the left* is a diagrammatic sketch of the journey made by Dr. Fuchs and his team from Shackleton Base over the South Pole to Scott Base. *Above* is a more detailed drawing of the last stage, through the Skelton Glacier.

Starting from the left-hand bottom corner of the far page, the route runs from Shackleton Base, where Fuchs and his party spent the last Antarctic winter. The hardest part of their exploration, which they had reconnoitred shortly before beginning the main journey on November 24, was from Shackleton to the advance depot at South Ice. The course included the passing of such obstacles as the Theron Range, the Slessor Glacier, Shackleton Range and the ice escarpment to the north of the by-no-means unformidable Nunataks. The expedition's tracked vehicles were frequently slowed up by soft snow or severe crevasses. In spite of inevitable delays South Ice was reached at Christmas and from then onwards conditions were easier to the Pole (January 19). After a pause and rest with the Americans at their Amundsen-Scott scientific station, Fuchs turned north for the second part of the trek. Crevasses again impeded progress to Depot 700, and owing to bad weather Hillary was unable to fly up from Scott Base to meet the trans-Polar party on the pre-arranged date. However he was able to join them soon after they left Depot 700 and give assistance as guide. Skelton Glacier is shown in detail with its hazards of Upper and Lower staircases, crevasses, greasy surface and snow-covered ice.

The distance from the Entrance, where Plateau Depot was situated, to Skelton Depot, at the far end, was about 100 miles. For the first time since the explorers left South Ice and headed on to the Polar Plateau, they were among mountains. The passage through the Skelton Glacier was made with speed. Once this was achieved their journey's end was in sight, for Scott Base was only 180 miles away.



THE SHAPE OF THE SOUTH POLE—CONFIRMATION THAT ANTARCTICA IS A CONTINENT: The sketch, based upon information published from the geologists in Dr. Fuchs' team, shows the situation of the Pole, high above a valley of ice dividing two submerged mountains. Regular seismic shots and gravimetrical surveys were made throughout the journey.

Until about a year ago it had always been considered that Antarctica was a continent covered by ice and snow, as opposed to Arctica which is a frozen ocean. Then geographers and geologists began seriously to consider the theory that the South Polar regions really comprised a submerged series of land masses and that possibly they were basically an archipelago. The phrase, "the Frozen Continent," much favoured by journalists in their descriptions of Antarctica, went sharply out of fashion. However, it can now be reinstated for, according to the researches of the Fuchs' expedition, the Antarctic *is* a continent. Along their traverse of nearly 2,200 miles gravimetric surveys were taken every fifteen miles. From Shackleton to the Pole seismic shots were made every thirty miles and from the Pole to McMurdo Sound every sixty miles. The bulk of the records has still to be collated but there seems no doubt that buried below the ice are ranges of mountains, reaching their highest on the McMurdo Sound side of the Pole.

GUARDIAN OF THE ANTARCTIC VASTNESS: The shadow of the helicopter from which this picture was taken falls on the ice covering McMurdo Sound. The Antarctic can only be approached through dangerous waters.

A SNO-CAT IN DIFFICULTIES: It has fallen into a crevasse and is partly submerged in snow. Behind is a sledge with petrol and stores. Such halts as this caused inevitable delay while members of the expedition engaged in digging out. But in spite of such mishaps one of the major results of Dr. Fuchs' expedition has been clear proof that the Antarctic is now open to tracked vehicles. Of the eight vehicles with which he left Shackleton Base five reached the Pole and four of them —Sno-cats—completed the whole of the 2,150-mile journey.

TRANS-ANTARCTIC EPIC

(*Continued from page 463*)

his own country. One disadvantage to overcome was that although there was much climbing and glacier experience to be found in New Zealand, there was little direct knowledge of life and work in Polar lands or of the techniques of Antarctic sledge travel. Fuchs on his side had the advantage of being as experienced a Polar traveller as could be found, with years of work in the Graham Land surveys, and he was to have with him several men who had trained with him.

In November 1956 the *Magga Dan* sailed from Britain to the Weddell Sea, and after a further struggle with the ice in those most dangerous of all Antarctic waters, reached Shackleton Base. In the Antarctic autumn of early 1957 aircraft carried a party to establish an advance base at South Ice some 350 miles inland on the edge of the Polar plateau. This was manned throughout the winter. On October 5, 1957, Fuchs set out to make land contact and to pioneer a route to South Ice. The conditions encountered on this journey were fantastically severe and dangerous. Indeed, it is doubtful if a more difficult terrain has ever been crossed by man.

Huge snow-covered crevasses and an appalling fissured ice barrier 800 ft. high had to be overcome. Time and again the Sno-cat tracked vehicles teetered on the edge of disaster. Sometimes they lurched partially into crevasses and, after tremendous effort, were recovered by other attendant vehicles. Dr. Fuchs cannot have felt happy when, after five weeks of exhausting struggle, two out of the three vehicles used on this reconnaissance reached South Ice, for he knew that this part of the journey had to be repeated with the main expedition. Nevertheless, on November 24, 1957, the final departure was made from Shackleton Base and the journey was on.

It was not until another month had gone by that this grimly arduous part of the journey to South Ice was again completed. The delay forced on Fuchs at this early

AN IMPORTANT POINT IN THE 2,150-MILE CROSSING OF THE SOUTH POLE: Vehicles and tents are grouped at Depot 700, some 500 miles north of the Pole and 700 miles from Scott Base in McMurdo Sound. It was prepared by Sir Edmund Hillary and it was near Depot 700 that he linked up with Dr. Fuchs to accompany him on the last stages of his journey.

stage began to give rise to some anxiety. Hillary was pressing on towards the South Pole, laying the appointed depots along a route which he had pioneered from Scott Base aided by dogs, modified farm tractors and, of course, aircraft. The main plateau depot above the Skelton Glacier had been established. Despite crevasses, "white-out" (conditions of low visibility similar to fog), good speed was made and Hillary reached the South Pole on January 3.

This dash by Hillary to the South Pole from Depot 700 was not part of the original schedule. An unfortunate misdirection of a telegram from Hillary led to publication of details of disagreement which might happily have remained unknown were it not for the doubtful blessing of wireless. In effect, Hillary recommended Fuchs, then heading south from South Ice, to abandon the second part of the crossing by flying out from the American South Pole base, and returning to complete the second half of the journey the following season. Hillary and his men, less experienced than Fuchs, were no doubt appalled at the prospect in front of Fuchs in the light of some of the conditions they had encountered. They genuinely believed that Fuchs, if he continued his deliberate advance—he was still then hundreds of miles from the South Pole—would be overtaken by the Antarctic winter and meet the same fate as Captain Scott.

There was no comparison between the two sets of circumstances. Although Fuchs had still a long and difficult journey to make he knew that he had already overcome the worst part of it. Although, if he maintained the speed he was then making, he would not leave the South Pole until the same date as Scott, their situations were in no way analogous. Scott, already worn out by the arduous man-hauling sledge journey, had to face a march on foot, already suffering from deficiency disease. Fuchs, equipped with the most modern vehicles, was confident that if unexpected disaster did not befall him he would successfully complete the journey.

W ZEALANDERS READY TO GO: Members of Hillary's team stand by vehicles at Scott Base. They were about to set out on the long journey to establish Depot 700, from where they made their dash to the Pole itself.

CONQUEROR OF EVEREST AND OF THE SOUTH POLE: This unique distinction belongs to Sir Edmund Hillary, seen here looking from one of his tractors in the Antarctic snows. With his team of New Zealanders he left Scott Base on October 14, 1957, on a mission of establishing bases up to 700 miles away for Dr. Fuchs. When Hillary had carried out this task, he made a dramatic unscheduled dash to the Pole, arriving there on January 3, 1958.

NUARY), 1958: Fuchs (right) and Hillary at the Sout Pole. The latter had returned there by a to greet the first man to have come up fr m the Weddell Sea. Needless to say, a tremendous welcome was provided by the merican scientists living at the Pole.

JOURNEY'S END FOR DR. FUCHS: The artist's impression is of Scott Base. The New Zealand flag flies from the mast, as this was the headquarters upon which Hillary based his operations. Here Fuchs and his party, accompanied over the last stages by Hillary, arrived on March 2, thus becoming the first men ever to make a land crossing of the Antarctic Continent.

His reply to Hillary made clear his steadfast determination to press on with his plans, nor did he modify the all-important scientific work which he was carrying out. By the time he reached the South Pole on January 19 ice-sounding had revealed with some certainty that the Antarctic was a single continent and not, as has recently been suggested, several land masses and possibly an archipelago.

Every night as the sledge train halted, a deep pit was dug, cores of ice extracted, temperature and glaciological observations made. Finally, the following morning a seismic shot was fired to measure the depth of the ice (by echo sounding). For the first time the invisible profile of the Antarctic continent was being charted. Not far south of the South Pole (on the Ross Sea side), where the ice was thought to be 10,000 ft. thick, land was later detected a mere 1,500 ft. below the surface.

On January 24 Fuchs left the South Pole, now making good time. A fortnight later he had covered the 500 miles to Depot 700, still continuing the scientific observations—seismic, magnetic and meteorological—but with rather greater spacing between the seismic shots. The ultimate gratification in the shape of the scientific work went on. Approaching Depot 700 severe crevassing was once again encountered, but there, joined by Edmund Hillary, the expedition pressed steadily southward. Hillary had faithfully done his work and, as Fuchs later said, comparative freedom from the sickening lurch on the edge of a crevasse marked this stage of the journey. When Depot 700 was reached on February 17 and the Plateau Depot six days later, it became apparent that triumph was in sight.

Good weather still aided the onward march, the Sno-cats sailed without difficulty over the deep snow that had impeded Hillary more seriously on his outward journey with his farm tractors. Only the Skelton Glacier and the "stairs" to the main sweep of its ice lay ahead of them. Once again the combination of Fuchs and Hillary was enough to make light of this last hazard. Finally, a race on the flat of the Ross ice shelf brought the party within sight of Scott Base. Fuchs refused to make a final headlong dash but camped some miles short of Scott Base and drove in in triumph on March 2 (one day less than the 100 days he had estimated).

He was greeted by a welcoming party of New Zealanders, Americans, journalists and photographers, and his own air party, headed by Squadron Leader Lewis, who had himself carried out a remarkable journey—a flight of 1,000 miles across the Antarctic in a single-engined Otter. So ended this great journey. It has had its terrifying moments, shown by the photographs of vehicles leaning over abysmal depths. There were moments when snow bridges collapsed behind and ahead and to the side of the Sno-cats. There was the incident when what looked like a whirlwind of snow betokened a fall-in of a crevasse "lid," fortunately to the side.

Carbon monoxide poisoning, which made Geoffrey Pratt very ill at one time, was a hazard promptly relieved by oxygen cylinders dropped by co-operative American aircraft. Perhaps the strangest of all the incidents of this memorable journey was the arrival at the South Pole and the encounter between Hillary and Fuchs, long-awaited like the meeting between Stanley and Livingstone . . . Nansen and Jackson . . . on this occasion, however, surrounded by journalists and a welcoming American admiral.

So the main British Polar journey has ended. The work of the Geophysical Year Expeditions of all the nations still continues. British scientists, with those of many nations including French, American, Russian and the very considerable Australian effort, continue to work in different parts of the Antarctic. It will be many years before all the scientific work of this great co-operative international effort is complete. Other nations may have mounted bigger expeditions. None will have undertaken a greater task and discharged it more successfully, more determinedly and more modestly than has Dr. (soon to be Sir) Vivian Fuchs.

IN AND ABOUT THE HEDGES

Some Thoughts on the Differences Between Hedges and Their Associations with Birds and Wildflowers, Particularly Cuckoo-Pint Which is Known by so Many other Names

By BRIAN VESEY-FITZGERALD

TWO of the hedges which enclose my garden are old country hedges planted on shallow banks. I think it probable that they are remnants of the hedgerows which were planted in the eighteenth century when the land hereabouts was enclosed. The other two hedges were planted some sixty years or so ago when the enclosed land was "developed." This was done by a company whose directors were obviously convinced that a "gentleman's residence" ought to be enclosed within thick barriers of laurel and holly. Although laurel (and, presumably, also holly) was fashionable in those days, I think that the company must have had a cut-price contract with some nurseryman for these two plants, for they have been scattered with quite exceptional liberality all around the neighbourhood.

Of course, my laurels are not true laurels. The true laurel is the sweet bay, which is the laurel of conquerors, the "laureate" of poets and Nobel prize-winners. My laurel is the cherry laurel (*Prunus laurocerasus*), which is the more common of the two "laurels" of the gardener—the other is the Japanese laurel (*Acuba japonica*), which is actually a member of the same family as the dogwood—but which is not really a laurel at all but a member of the rose family.

Left to itself, the cherry laurel can be quite an ornamental shrub with a free and graceful growth. Properly clipped (and you see that very rarely nowadays: the ordinary jobbing gardener cuts a laurel hedge as he would a privet, and that is not the right way at all) it has, I admit, a certain solid dignity. You feel sure that the man who owns it has a brief-case and a bank balance, is a regular attendant at Matins, and returns thereafter to a good meal of roast beef and Yorkshire pudding and apple pie. You really cannot ask more of a hedge than that; and it is evergreen into the bargain.

And yet, I find that, clipped to form a hedge, laurel has a number of serious drawbacks. For one thing, the fact that a plant is evergreen does not mean that it does not shed its leaves. It does. The only difference is that it does not shed its leaves for the winter months: it sheds them all the year round, in a continuous process. It is true that one does not usually notice this because each individual leaf usually remains on the bush or tree for a varying number of years. But, as the plant ages, so the life of the leaf shortens, the fall becomes more constant. At any rate, this is certainly so with my laurel. We are continually tidying-up underneath it. Then again, there is no "bottom" to a laurel hedge: certainly not to an old one. It may look dignified enough from a distance, and it is true that it offers a barrier to the ingress of humans (who would use the gate, anyway), but it offers no obstacle whatsoever to dogs, who would come and go as they please: and, indeed, did, until I wired my two hedges.

But these are not the greatest drawbacks to a laurel hedge. There are two much more weighty: the birds do not like it and other plants do not like it. In all the years during which I have had to put up with these two hedges—it would be far too big a job to grub them up—I have never seen birds using them. They do not nest in them and they will not roost in them. In fact, it is rare to see one perching on them, even temporarily. And as to plants: they will not grow beneath laurel; they will not even grow anywhere near it. The aging laurel sucks all the goodness from the ground.

How different are my other two hedges! The birds are in and about them constantly, summer and winter, nesting in them, roosting in them, feeding in them and beneath them. And year after year, even after all this length of time, I find some of the old field wild flowers growing on their shallow banks. For one of them, the cuckoo-pint, I shall be looking in a week or so. It has not failed me these twenty years past.

The cuckoo-pint fascinates me. (Mine, needless to say, is the common variety, *Arum maculatum*. Naturally, I have tried to grow the larger rare cuckoo-pint, *Arum neglectum*, which is so plentiful around Ventnor, in the Isle of Wight, but without any success at all. And I do not think this is because my soil is not to its liking, but because the climate in my neighbourhood is too severe for a plant which shows its leaves above ground in the winter.)

I find the many country names for the cuckoo-pint fascinating. I have heard it said that there are more than 100 of them, which is sufficient indication that it is a plant of personality. I wish that I knew them all. I have to be satisfied with but ten alternatives: lords-and-ladies, kings-and-queens, soldiers-and-sailors, wake robin, babe-in-the-cradle, Adam-and-Eve, parson-in-the-pulpit, dead-men's-fingers, red-hot-pokers, and friars'-cowl.

All these names, with the possible exception of wake robin, are quite obviously derived from the plant's unusual appearance. But I have never heard a really satisfactory explanation for the most common name of all—cuckoo-pint. If anyone can tell me how the plant came to acquire this name I shall be most grateful.

The scarlet berries, which appear in late summer and autumn, are poisonous. This, one would have thought, remembering the countryman's exaggerated respect for poisonous plants (and those reputed poisonous), would have been sufficient to cause the cuckoo-pint to be given a very wide berth—but not so. The underground parts were once widely used as a substitute for arrowroot. In the first half of the last century, a quite considerable industry grew up in the Isle of Portland and the stuff was sold, even as far afield as London, as "Portland Sago." There is no such industry to-day, but one or two gypsy families still use it for that purpose.

The club-like central column and its large green hood are, together, usually regarded as the "flower" of the plant. In fact, they are the whole inflorescence, the minute flowers being situated on the lower part of the column, enclosed by the swollen base of the hood. This is an elaborate contrivance for ensuring cross-pollination. And it is this that is the most fascinating thing about the cuckoo-pint.

At the height of the flowering season, which is in April and May (but I have often found it in flower in the last week of March), the cuckoo-pint is extremely attractive to the insects upon which it depends for the dispersal of its pollen. It has a remarkably unpleasant scent, which is obviously repellent to bees, but most attractive to flies, for it is the scent of high carrion. I have often thought that the attraction of this scent is reinforced by the appearance of the central column, which really does look rather like a lump of meat. Be that as it may, the flies swarm to the cuckoo-pint in flower.

It is worth while opening the swollen base of the hood, the floral chamber. The entrance is filled with a fringe of long, stiff hairs, which point downwards, and below this fringe are the male flowers, packed closely together, each bearing two to four stamens. Below them is another fringe of downward-pointing, long stiff hairs, and below this fringe are the female flowers, each composed of one carpel only. Here, at the bottom of the chamber, is a rich feast of nectar, and here you are practically certain to find a great many insects (midges and small flies and one or two larger flies) imprisoned.

It is easy enough for the flies to get in. They have no difficulty in crawling past the downward-pointing hairs to reach the nectar: but once in, they cannot get out past the protective fringe. They are probably too drunk with nectar to try, anyway. However, some at least of the visiting flies will be carrying pollen from another cuckoo-pint, and once all the female flowers have been fertilized, the hairs protecting them wither and the flies are then free to crawl up as far as the male flowers, where they collect the ripe pollen. Once the pollen has been collected, the hairs above them, filling the entrance to the chamber, wither, and the flies can then escape and carry the pollen to another cuckoo-pint.

It is all wonderfully thought out: a marvellous example of co-operation between plant and insect, the fruits of which can be seen in the dense clusters of scarlet berries later in the year. But perhaps co-operation is not quite the right word. The cuckoo-pint cannot lose. But some of the insects can. They can, and do, lose their lives in the nectar-filled floral chamber. There are worse ways of dying.

POSSIBLY BRITAIN'S LAST WORKING OXEN: Joy and Jim, which are believed to be the last two working oxen in Britain, are seen at work in Earl Bathurst's Park at Cirencester. They are the last of sixteen once employed on the estate, and are in the care of Mr. Edward Smith (on right), who has worked in the park for nearly forty years. Mr. Smith has appeared with these oxen's predecessors in films and at pageants. *On right*—The two oxen are ready for the day's work.

ROYAL HOMECOMING

The Queen Mother is Welcomed by Members of Her Family After Her Extensive Tour of New Zealand and Australia

HOME AGAIN AFTER A DELAY OF SOME 68 HOURS: The smiling Queen Mother is followed by the Queen as she leaves the B.O.A.C. Britannia airliner at London Airport for the official welcoming ceremony at the end of her extensive tour of New Zealand and Australia. Originally, the Queen Mother had been expected at the airport a few days earlier. But owing to engine trouble which had developed in the Qantas Super Constellation in which she had started her homeward journey from Australia, her arrival had been delayed. The first delay had been at Mauritius. Her Majesty left the Super Constellation at Malta and completed the journey in the Britannia.

WALKING FROM THE AIRLINER AT LONDON AIRPORT: The Queen Mother is accompanied to the airport buildings for the welcome by the Prime Minister and other members of the Government as well as by representatives of the Commonwealth and other officials. As soon as the Britannia had come to a standstill and the ladder placed in position, the Queen, Princess Margaret and Princess Anne went into the aircraft for the family reunion. The Queen Mother, who had been away since January 28, had flown right round the world. On her outward journey to New Zealand she flew across the Atlantic and made a short call in Canada before proceeding across the Pacific. Her Majesty carried out an extensive programme of engagements in both New Zealand and Australia, and received a warm welcome. Owing to the delay in the return journey to England the Queen Mother had to cancel her visit to Kenya to open the new airport at Nairobi.

PRINCESS ANNE CONSULTS HER WATCH: She stands with other members of the welcoming party while waiting for the aircraft to land. ***On left*****—The three Royal ladies walk to the airport buildings. Later, they drove to Buckingham Palace.**

THE NEW B.B.C. TELEVISION CENTRE IN WEST LONDON: Cranes loom over the main building of the Centre, which is taking shape at the White City, London. When the entire structure has been completed, it will comprise the biggest television headquarters in Europe. The total cost of the vast project is expected to be in the region of £9,000,000.

Television City. That is the phrase which comes to mind to describe the British Broadcasting Corporation's new television centre which is now in an advanced stage of construction on a site covering an area of 13 acres at the White City. When completed, at a cost estimated to be in the region of £9,000,000, the centre will become the largest television headquarters in Europe. Although delays in the initial stages of the building programme caused considerable concern, they have enabled designers to keep up with developments in the technical and entertainment field, and when the centre is fully operational the studio and lighting equipment will be such that it can be readily adapted for colour television. Building plans were first drawn up in 1949 but they have been modified since then. The new centre will now comprise a main block, containing seven studios and several hundred offices, the scenery block (which is now providing most of the sets used at Lime Grove and Riverside), a restaurant building, a works section, and a tail running from the main block. Four of the main studios will each be larger than any television studio now in use in Britain. All seven studios will have their own air-conditioning plant. In the basement are dressing-rooms for about 550 artists. The material being used in the construction of the main block includes 8,000,000 bricks, 55,000 tons of concrete, and 4,300 tons of steel. Seven hundred men are at the present moment engaged on the site —but more will be required as Television City springs up.

A DESIGN WHICH IS NOW COMING INTO BEING: The model gives an impression of how the Centre will appear when completed. Altogether there will be seven studios, four of them larger than any now in use at the B.B.C.'s Lime Grove Studios.

BUILDING FOR THE FUTURE

The B.B.C.'s New Television Centre, in West London, is Destined to Become the Largest TV Headquarters in Europe

A BIRD'S-EYE VIEW OF THE SITE AT THE WHITE CITY: The camera looks down on the vast site which covers an area of 13 acres. Running across the foreground is the Metropolitan Line while, in the right background, is the White City stadium. The Centre, on the old White City site, is a skeleton of steel and concrete, now framed to roof level. The inner ring, enclosed by seven storeys rising to a height of 90 ft., will enclose a garden about the size of London's Piccadilly Circus.

On left—

THE STEEL SKELETON OF THE MAIN BUILDING: Circular in its design, the main block covers an area of 3½ acres. It is expected to be brought into use in stages, starting early in 1960. Technical arrangements have been made to adapt the studios for colour transmission when this becomes practicable.

On right—

THE " NERVE CENTRE " FROM ANOTHER ANGLE: The view of the main building is taken from the roof of the scenery block, which is now in service. The largest studio at the Television Centre will have a pit suitable for use for aquatic programmes. The amenities in a "star" dressing-room include a luxurious lounge and private bathroom.

DRIVER AND GUARD : Mr. R. C. Turner leans from his cab to have a chat with the guard, Mr. George Packham (who has been nearly fifty years on railway service), during a stop on the Lewes-East Grinstead line. This railway, for long known as the "Bluebell" line because of the beautiful scenery through which it passes, was closed to passenger traffic last Sunday (March 16). Four trains were run daily in each direction. A public inquiry was held last October and reported in favour of closing the line.

A SIGHT WHICH CAN NO LONGER BE SEEN : A one-coach train sets out on its journey from Lewes to East Grinstead. The picture was taken shortly before the line ceased to have any existence in time-tables. The last passenger train scheduled to run was the 4.28 p.m. from East Grinstead to Lewes last Sunday.

FAREWELL TO THE "BLUEBELL" LINE

The Closing of a Railway Through Fine Sussex Scenery

The closing of a railway is always a sad occasion. Since the reason for the closure is usually economy, the lines taken out of service are more likely to amble through pleasant countryside than speed through busy urban areas. Such certainly was the case with the East Grinstead-Lewes "Bluebell" line which was due to cease to exist for passengers last Sunday. Presumably the names of West Hoathley, Sheffield Park and Newick and Chailey will no longer delight students of time-tables. Horsted Keynes remains because it is a junction on the Haywards Heath-East Grinstead line.

The "Bluebell" line was opened in 1882 and first closed three years ago, in June 1955. Owing to local objections it was reopened in August 1956, but the reprieve proved to be temporary. Last October the Central Transport Consultative Committee held a public inquiry into another proposed closure and its members' report was issued a few weeks ago. The Committee stated that the withdrawal of the service would be in the public interest on grounds of economy. At least £33,000 was being lost annually and there was a contingent liability of a possible capital outlay for its maintenance. In spite of various objections raised at the hearings, the Committee could not find any overriding consideration for keeping the line open.

ROUNDING A CURVE : Such splendid views of the Sussex Downs were one of the joys of riding on the "Bluebell" line.

On left—

NEARING THE END : There is an air of melancholy about the engine and coach soon to be taken from service.

Below—

"RIGHT AWAY!" : The train prepares to leave Sheffield Park, one of three stations which closed last Sunday.

PICKING UP THE STAFF : The signalman hands it up at Culver Junction, outside Lewes. Here the line branches off on to a single track from the railway which runs between Lewes and Uckfield.

AIRCRAFT AND ROCKETS

A New Italian Flying-Boat; a Complement of Rockets; and a Revolutionary "Flying Jeep."

On left—
AN ITALIAN FLYING-BOAT IN THE POOL OF LONDON: A new twin-engined flying-boat from Italy is being released from its moorings near the Tower of London by the river police in readiness for take-off. The aircraft, which has caused considerable interest since its arrival in this country nearly two weeks ago, is known as the Piaggio T.135. It is manufactured by the firm also responsible for the production of Vespa scooters. While in Britain, the Piaggio T.135 is being based at Croydon Airport and on the River Medway. The new flying-boat has taken shape as the result of careful planning and design carried out by a team of experts during the last ten years. It has met with considerable success when used as an air-sea rescue aircraft, and is also being used as a private aircraft in the United States. The power for the Piaggio T.135 is provided by two Lycoming engines which are manufactured under a special licence at the Italian factory. An advantage of the pusher-type propellers is that, being placed at the rear of the wings, they provide a very low noise level which does not greatly disturb the passengers. The flying-boat has a water rudder for manœuvrability and a retractable undercarriage. Spacious accommodation in the cabin allows for five people with ease and the interior has been carefully designed and laid out in the style of luxurious care. The cruising speed of the Piaggio T.135 is 190 miles per hour.

On right—
A WINGED DESTROYER: A firing power equal to a number of salvos from the main battery of an offshore destroyer is suspended from the underneath of the wing of a United States Navy heavy attack aircraft. Lacking recoil, they may be fired from a simple light tube against surface or air targets. The assortment of rockets and expandable launchers seen under the wing in the picture are, from left to right: a single 2.75-in. rocket, a single Zuni, a combination of 2-in. and 2.75-in. rockets in a launcher, a seven-unit launcher for 2.75-in. rockets, a nineteen-unit launcher for 2-in. rockets, a nineteen-unit launcher for 2.75-in. rockets, and, lastly, a four-unit launcher for Zuni.

On left—
AN EXPERIMENTAL AIRCRAFT FOR THE UNITED STATES ARMY: This vertical take-off aircraft, without wings or conventional propellers, is being developed in Philadelphia, Pennsylvania, for the Army Transportation Corps' Research and Engineering Command. Two horizontal rotors, housed in the front and in the rear within the chassis, are shielded on all sides for safety. It is designed to fly at speeds up to 150 miles per hour and to rise and descend vertically. When this new type of "flying jeep" undergoes a flying test it is expected to be able to fly within a few feet of the ground, pass underneath low bridges and even thread its way through city streets. This experimental aircraft, which combines the qualities of a land vehicle and those of a small helicopter, has been designed by Piasecki Aircraft Corporation, of Philadelphia, for use by the U.S. Army. The company is engaged in all phases of vertical lift research and development.

CUCKOO IN THE NEST

Remarkable Pictures Illustrate the Amazing Childhood of a Cuckoo Born in a Lesser Whitethroat's Nest

A LITTLE STRANGER IN THE NEST: *Left*—The biggest of the three eggs has been laid by a cuckoo in a lesser whitethroat's nest. Although the egg is larger than the other two, it is very similar in colour. Before the visit of the cuckoo there had been two more eggs of the whitethroat but both were removed by the interloper. *Right*—The baby cuckoo has been born and the young whitethroats have been ousted. One is on the edge of the nest. The other had been thrown to the ground.

Once again, with the approach of the mating season, it is interesting to recall the method adopted by the cuckoo. The pictures on this page, which were taken last year, illustrate the growth of a young cuckoo which had been hatched in the nest of a lesser whitethroat, the smallest of the warblers. The nest of the whitethroat, as recorded by the photographer, is very frail and thin in construction. When the nest was first seen by the photographer on June 21, it contained four eggs, the normal number laid by the whitethroat. At that time there was no trace of a cuckoo in the vicinity.

By chance, the photographer saw the nest again four days later and noticed that there were now only three eggs: two of the original four and one larger egg which had been laid by a cuckoo. There was no sign of the other two. The new egg, although somewhat blurred in the markings, was of the same shape and ground colour and had obviously been accepted by the warblers as their own. The three young birds were hatched a few days later and the following diary kept by the photographer records the growth of the young interloper.

THE HUNGRY YOUNG CUCKOO GROWS IN SIZE: *Left*—The young bird, a few days old and with its eyes open, is fed with caterpillars and other insects by one of the warblers. *Right*—Nine days later, when the cuckoo was almost too big for the small nest, it snapped with its beak when the camera was moved too near. But the bird still had to be fed by the foster-mother.

July 7: The birds have been hatched but the nest only contains the young cuckoo. Both the warblers' own babies are dead; one has been thrown to the ground and the other to the side of the nest. Hatched the day before, the young cuckoo has managed to throw out its foster-brothers without hindrance from the mother (cuckoo's eggs only need 11-12 days of incubation, which is one or two days less than those of its foster-parents).

July 11: The young cuckoo has its eyes open and is being fed at intervals by both warblers, the food consisting of small insects and caterpillars. It now occupies the entire nest, gapes continuously for food and cheeps with a thin, quivering voice exactly like a young warbler. The bird appears to have been accepted by the foster-parents as one of their own.

July 15: Its growth has been remarkable over the last four days, and it is now feathered all over. It requires constant feeding. After every second or third feeding, one of the warblers has to clean the nest. If the foster-parents wait even more than a few seconds in the course of the feeding, they get a sharp tap from their cynical foster-child.

July 17: Now even more ferocious and insatiable. The two parents in turn fly in with flies, moths and caterpillars from the neighbouring trees and are only just allowed time to get their own food. The small, frail nest is flat and shapeless under the weight of its abnormal inhabitant.

July 20: The young cuckoo, soon to be fully-grown, is now fairly hostile in disposition towards the photographer, inflating its plumage and dealing out energetic strokes with its beak if the camera is moved too close.

July 24: The nest is now deserted. A search has resulted in the discovery of the fugitive in some scrub 50 yards away, where the young cuckoo is busy devouring anything that the two warblers can manage to catch. Though fully fledged, it makes no attempt to find any food for itself. Its cry still imitates the shrill, plaintive cheeping of the young of a small bird, urging its foster-parents to even greater efforts to satisfy its greed, and not letting them suspect that it is not their own child at all. Alarmed by the warning cries of its foster-parents, the cuckoo flies from branch to branch. It is both shy and watchful.

STILL DEPENDENT UPON ITS FOSTER-PARENTS: The cuckoo, having deserted the nest and now perched in a pine tree, is still fed by the whitethroat. *On left*—The nest has nearly collapsed under the weight of its massive occupant.

PROGRESS IN INDUSTRY AND ENGINEERING—*A Weekly Survey of Achievement in Britain and Overseas*

Crisis in the Film Industry

By "THE SPHERE" INDUSTRIAL CORRESPONDENT

EARLY this month, a group of somewhat doleful gentlemen from Britain's film industry formally called upon the Chancellor of the Exchequer. They were not the only such deputation to do so, nor was it the first time that they had paid such a visit—though they hoped, at least, that it might be their last. Asking the Chancellor for relief from Entertainments Duty, and illustrating their arguments with copious facts and figures, has crystallised, over the years, into an almost conventional pattern. But this year, of all years, it was anything but a formality. The British cinema is no longer a business complaining that taxation is unfairly robbing it of the growth in trade that it ought to share with business in general. It is one for which demand is lurching sickeningly downwards.

In 1955, and again in 1956, the number of cinema admissions in Britain fell by 7 per cent. Last year, the number dropped by a frightening 18 per cent., and in the last quarter of last year cinema attendance was more than a quarter lower than at the end of 1956. The actual total was 903,000,000 admissions for the year and 180,000,000 during the last quarter of 1957: about 2,000,000 people a day, that is to say, were going to cinemas in the closing months of the year. In 1946 the average was 5,000,000 people a day.

At the beginning of last year the cinema business had asked an independent statistician to predict for it the course of cinema attendance up to 1960. His forecasts of continued decline seemed to some cinema exhibitors too gloomy; but in practice the number of admissions last year dropped well below his most pessimistic guess at what might befall the industry in three years' time.

Cinema revenue from box-office receipts have not fallen as much as admissions since the end of the war; seat prices have gone up. Nevertheless, the total box-office receipts of the industry have fallen. In 1946 they were about £118,000,000, and last year, for the first time since the war, they may have fallen below £100,000,000. Nor have net takings fallen quite as much as the industry's total receipts. There has been a slight, though in the trade's view wholly inadequate, reduction in the big share that the Exchequer takes.

In 1946 more than £42,000,000, 35 per cent. of total takings, went in Entertainments Duty—last year the duty took only about 33 per cent., though even this meant roughly £32,000,000. As a result the money left in the industry has not wholly reflected the catastrophic decline of admissions in the last year or two; last year, for example, a reduction in duty meant that the actual net takings were probably about £64,000,000.

But these takings were certainly not enough to make any section of the British film industry prosperous. During the last two years more than 400 cinemas, out of the country's 4,500, were closed down; big circuits such as Rank and Associated British are closing cinemas, and not merely small ones. Even counting in the Trade's quite substantial sales of chocolate, nuts and ice-cream, which for many exhibitors are the last prop of solvency, cinemas as a whole were probably operating at a loss last year; certainly they were not making enough to cover a reasonable rent or depreciation upon the value of their buildings. And a slump at the box-office must inevitably be transmitted back through the distribution system to the makers of films. The Rank Organisation has cut its film production schedules and dismissed a number of studio technicians, and production by independent film-makers is at a fairly low ebb to-day.

Inevitably, everybody in the film industry puts the main blame on television, though few are satisfied that this is the whole story. So far as it goes, the little screen is obviously the competitor that has dealt the big one the most grievous blows. It has been calculated that for every new television set installed in a British home the cinema trade loses about fifty admissions a year. Last year, it may be noted, though television (and the "coverage" of commercial television programmes) went on expanding, it was not growing as fast as it had been; certainly not at a rate to explain the sudden acceleration of the cinema's decline. But the attractions of visual entertainment available at the flick of a knob, and, once the set is paid for, available "free," are immensely powerful competition for visual entertainment that one has to go out and pay to see.

Cinema exhibitors and film-makers, however, see television as only the most immediate of their competitors. Many other forms of entertainment and leisure activity, newly available to the masses whose horizons have widened along with their incomes, also compete for the time that used to be spent in a cinema. A similar falling off of film revenues in the United States, moreover, has cut down the quantity, and in some ways the average quality, of the films turned out by Hollywood. American producers are to-day perhaps more prepared for experimental ideas in low-budget pictures than in their palmier days. They are not turning out as much polished and dependable "box-office" light entertainment as they did ten years ago.

Like British film producers, they have, moreover, another potential customer, television itself. The films made for the two media are not the same—even in the United States television cannot afford to pay as much for a ninety-minute programme as exhibition throughout the world's cinemas will eventually bring in from a first feature. But in terms of total "footage" of shorter, cheaper films, Hollywood is producing almost as much for television as for cinema showing.

For the makers of British films, 1957 was a year of rather bitter irony. They have been accorded some Government protection for years: a proportion of the films that most British cinemas show have to be British, and of late a Government finance corporation has been providing most of the capital for their extremely risky business. Last year, a new Act of Parliament made compulsory a special levy on box-office receipts that had been collected voluntarily for some years and paid directly to the producers of British films.

In the Act, provision was made for a scale of levy that would bring the producers £3,500,000 a year over and above their normal earnings as a proportion of box-office takings. It offered them, perhaps alone in the whole trade, the chance of a better secured financial future than they had ever been able to look forward to. But the levy, even under the new Act, was made proportional to total takings; it had to be, if needy cinema-owners were to be dragooned into paying it. And the drop in attendance and total receipts has meant that the producers will not get as much as the Act laid down. They have not been able to contract out of the Trade's common plight.

Whether and how the film business can raise itself out of this slump remains to be seen. It is perfectly reasonable that it should, all sections speaking as one, appeal for an end to Entertainments Duty. Successive exemptions of this and that form of sport or entertainment have now left the cinema as the only entertainment paying this duty; in its present circumstances, this is obviously unfair. The duty should be abolished within a year or so, if not at once.

Clearly, that would be a shot in the arm. At one stroke the industry would have an extra £25,000,000 to manœuvre with, in reducing seat prices, investing in better cinemas, and experimenting with more complex techniques that might re-establish its competitive advantages over home viewing. It should provide the chance of better films, too; though film production is essentially a very expensive form of publishing, and to imagine that by spending more money every week's new first feature can be another *Bridge on the River Kwai*, for example, is simply unrealistic. But television standards of production are not likely to stand still, either. There may still be room for about half as many more televison "outlets" in British homes as are installed to-day.

Against this competition, not even an abolition of Entertainments Duty offers any guarantee that the cinema could stabilise or widen its present share of visual entertainment. But it would provide a breathing space. It would also place this industry face to face with its vital problems, removing the scapegoat of the tax collector behind whom people in the film business have always been prone to shelter from their own troubles.

FILM-MAKING ON LOCATION AND ON THE FLOOR: *Above*—The camera and arc lamp move in for a "close-up" during the filming of *Campbell's Kingdom* in the Italian Dolomites. *On right*—Seated in a canvas chair, an associate producer watches a rehearsal for *The Secret Place* filmed within the studio. On the left the microphone is extended at the end of a boom. Both films were made by the Rank Organisation.

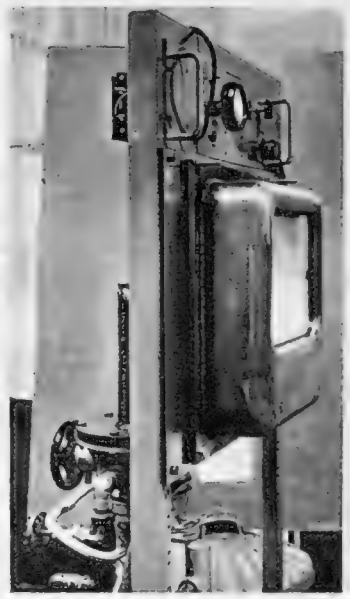
On left—

TRAINING IN INDUSTRIAL TEACHING

Trainees have stopped their practical work and are seated round a blackboard to learn from their instructors what they will next be doing on the machines. This " trade talk " is one of the basic forms of apprentice instruction given at the Letchworth Government Training Centre to intending apprentice instructors. The main aim of this intensive course is to bring out in them the qualities which make for effective teaching. The Ministry of Labour Government Training Centre at Letchworth was initiated to serve the domestic needs of the Government Training Centres just after the war. It was not until eight years later that the British Iron and Steel Federation sent observers to see how the G.T.C. apprentice-supervisor course had worked out. As a result of favourable reports, they asked whether the G.T.C. could take some of their own people. Eventually other member firms of B.A.C.I.E. sent people and the scheme expanded.

Since 1953, 116 firms have sent instructors in numbers from one to forty-eight on this course and nearly 460 have passed through. There are three main methods of teaching—by demonstrations and supervised practise on the workshop floor; by shutting the shop down on practical work to give a fifteen-minute trade talk *in situ* to prepare the students theoretically for the next session of practical (as seen in the picture on the *left*) and by trade lectures of about one hour, preferably in a properly-equipped classroom. On this basis every trait and skill that can lead to effective teaching is examined and criticised by the lecturers and by the trainees themselves.

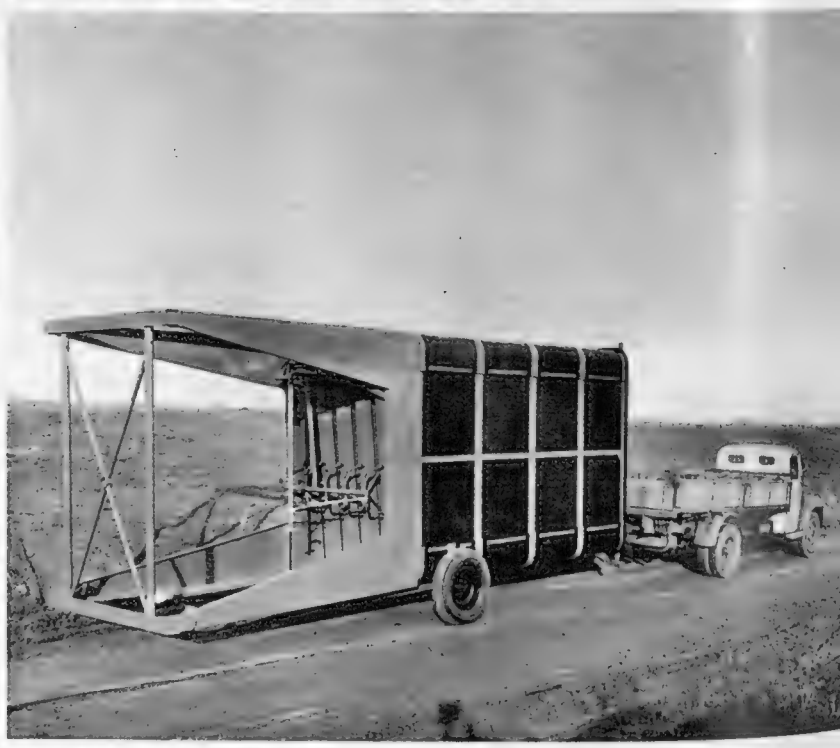
TELEVISION ON THE WALL



There is now the prospect of a flat television screen which can be hung on the wall in the same way as a picture. It is only a few inches thick and the invention, which is under development by Dr. D. Gabor, of the Imperial College of Science and Technology, is sponsored by the National Research Development Corporation. The progress in the development was made known earlier this month by Lord Halsbury, the managing director of the Corporation. At that time it was said that an experimental tube to provide a picture with a diagonal measurement of 12 ins. would be demonstrated in about two months' time.

PNEUMATIC STEEL-MAKING PLANTS

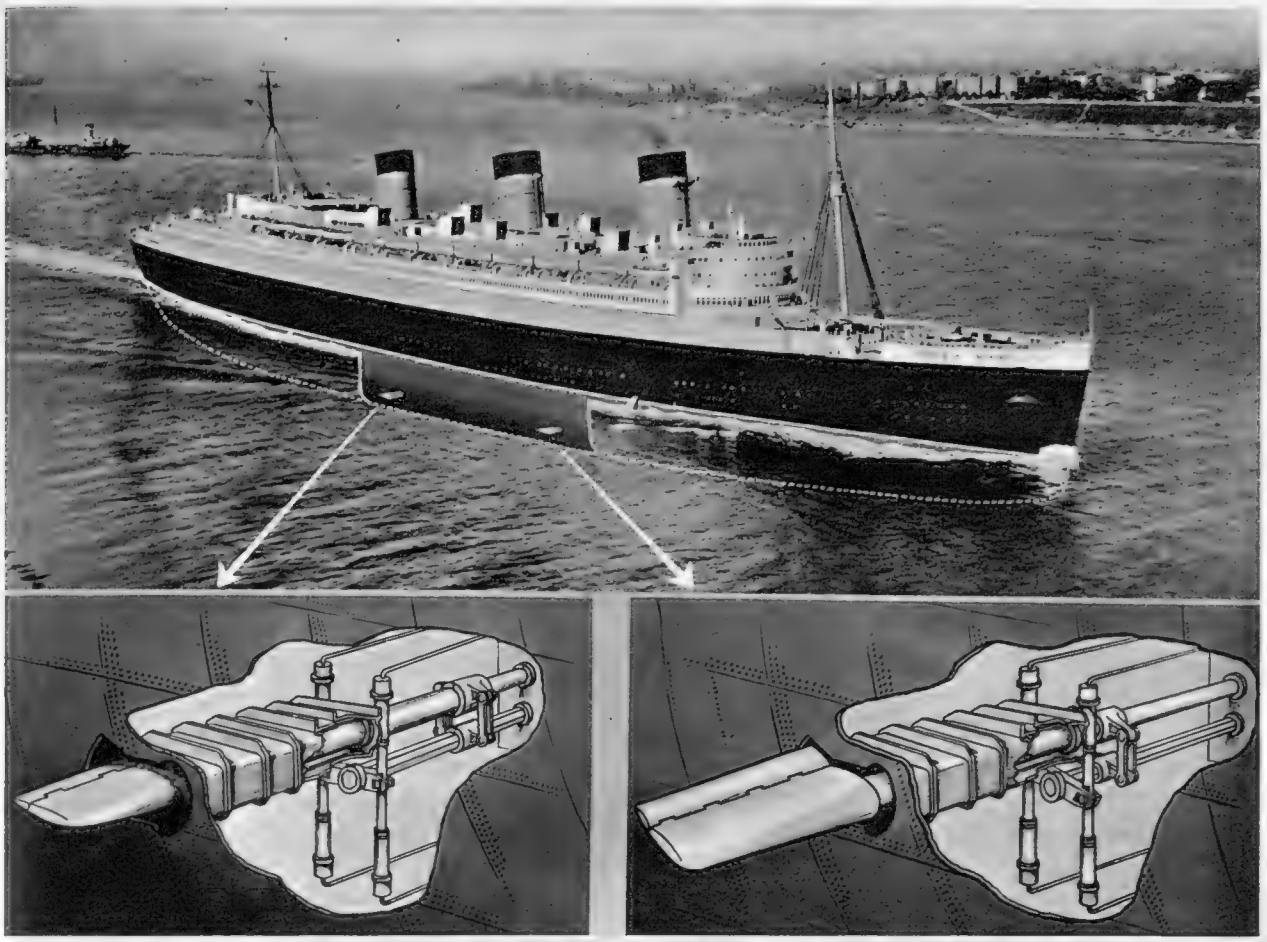
In the picture reproduced *above* the first bay of the new heavy fabricating shop, with a lift of 100 tons, is under construction at the Thornaby works of Head Wrightson and Co. Ltd. The advent of the tonnage oxygen plant is bringing about a revolution in methods of steel-making. It is not confined to the steelmakers—plant manufacturers are equipping themselves to meet the demands of industry. Among them is Head Wrightson, who are able to supply three main types of pneumatic steel-making plants. Much of the plant for these new processes is of massive construction. The Head Wrightson Machine Company works at Middlesbrough is able to machine parts up to 100 tons in weight. The Fabricating Shop will be in use in May.



BRITAIN'S FIRST MOBILE CEMENT SILO

The silo, which is the first completely mobile cement silo in Britain, holds between 20 and 40 tons, and can be towed by a conventional 1-ton lorry. It is designed to cut building transportation and erection costs, and is being manufactured by Road Machines (Drayton) Ltd. To eliminate any possibility of condensation, it is built of 15-mm. plywood on a steel frame. It is fitted with a 7·5-h.p. electric motor to provide power for a built-in rotary blower. Only 5 h.p. is absorbed after starting up and the air supplied then gives complete aeration to ensure that the contents are discharged rapidly and evenly.

PROGRESS IN INDUSTRY AND ENGINEERING—*A Weekly Survey of Achievement in Britain and Overseas*

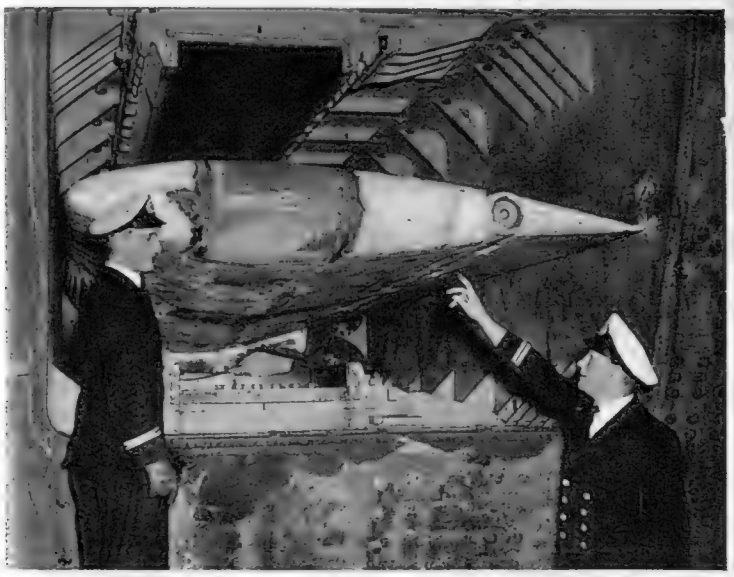


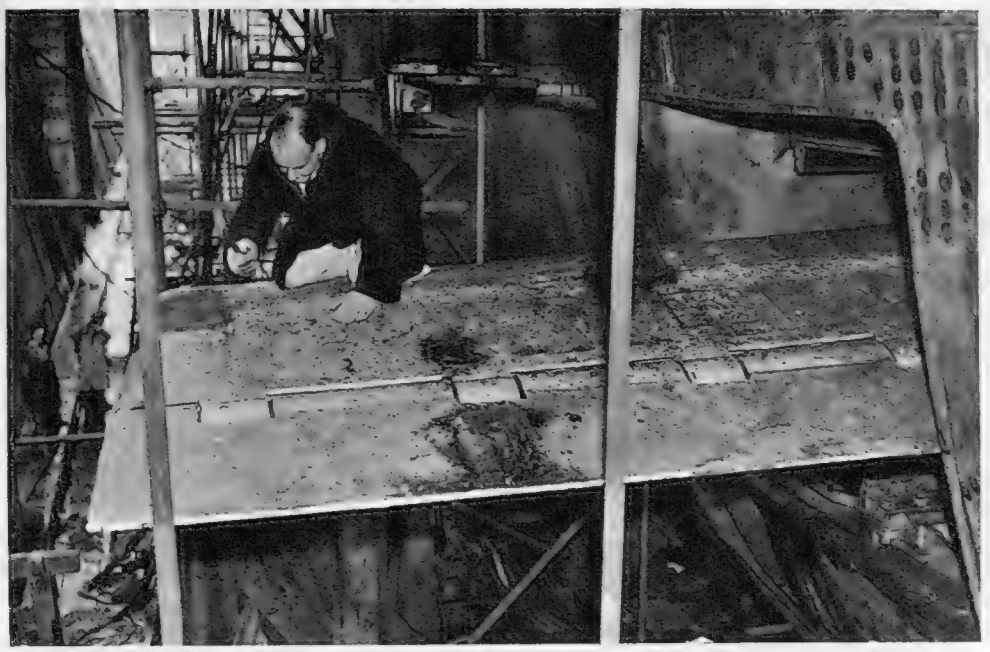
STABILISERS FOR THE "QUEEN MARY": In the artist's impression of the great Cunard liner, the starboard pair of stabiliser fins are shown as they would be extended in rough weather. The bottom left-hand diagram shows how a fin is retracted into the hull when not in use; the right-hand diagram shows a fin fully extended. The hull is cut away to show the operating gear. The Denny Brown stabilisers were fitted during the liner's annual overhaul in the King George V graving dock at Southampton.

REDUCING THE ROLL OF THE "QUEEN MARY"

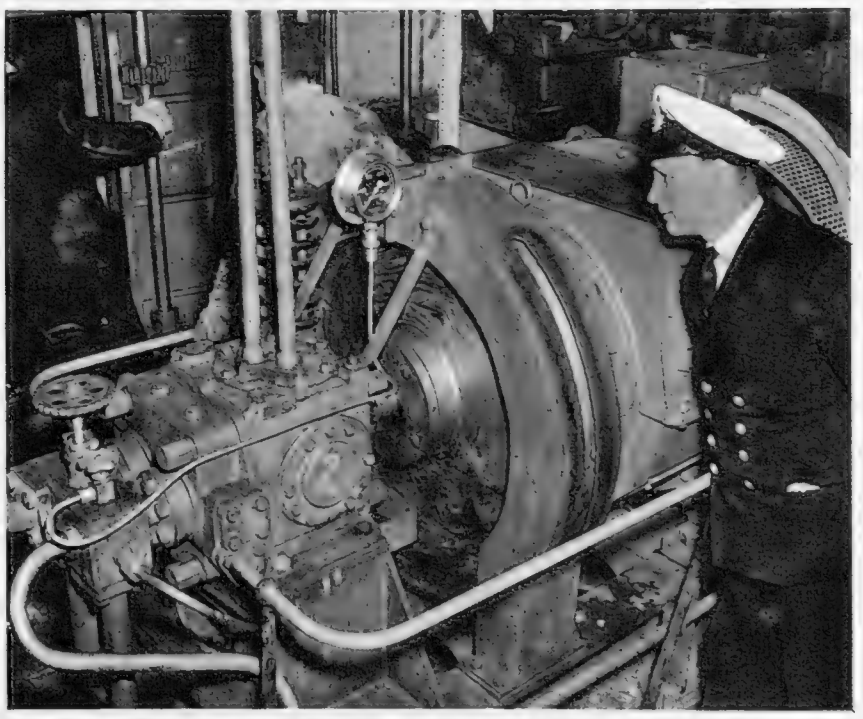
By the time the 81,237-ton Cunard liner *Queen Mary* resumes her Atlantic voyages on April 2, after her annual overhaul at Southampton, every part of her gigantic superstructure, from keel to masthead, will have been examined and cleaned. In addition to all the routine work the major task during the present overhaul has been the fitting of Denny Brown stabilisers to reduce roll at sea. Like her sister ship *Queen Elizabeth*, the *Queen Mary* has four fins, two on each side of the ship. One pair is forward of amidships, the second pair about amidships. The preparatory work on the installation of the fins was started last year, and has been proceeded with on all subsequent possible occasions.

Although the great liner is the second largest in the world, the question of finding room for the stabilisers presented a difficult problem. No suitable space could be found in her existing machinery compartments for fitting the equipment in the orthodox manner. Eventually, the internal parts of the fins were arranged so that the hydraulic rams operate vertically instead of horizontally, as in orthodox arrangements. This meant that the fore and aft floor space was considerably reduced. Consequently, with some re-arrangement of existing auxiliary machinery, the four sets of stabilising gear were accommodated without any major alteration to the layout of the main machinery. Other modifications were also adopted. The fin shafts and their operating gear are housed in four independent watertight compartments, and each pair of fins works independently of the other and is controlled from the bridge of the ship. Each of the four fins has an outreach of 11 ft. 4 ins., a width of 7 ft. 6 ins., and an area of 85 sq. ft.





THE FINS IN POSITION: One of the stabilisers is seen in a retracted position. *On right*—Mr. J. Van Nyvel, Assistant Engineering Manager in charge of the installation, inspects the port forward stabiliser of the liner.



INSPECTING THE MECHANISM: *Left*—Mr. Van Nyvel and Second Engineer J. Burgess (who is in charge of the installation for Cunard) are looking at the retracting mechanism for the stabiliser. *Right*—The machinery incorporates the main power unit for the port forward fin. The installation of the stabilisers in the *Queen Mary* has involved the fitting of approximately five miles of electrical cable and more than 12,000 ft. of piping. The *Queen Mary's* annual overhaul began on January 23.

The World of Books

CHURCHILL'S ENGLAND

The Final Volume of the "History of the English-Speaking Peoples"; The Record of the First Punjabi Regiment; Fact and Fiction in Various Forms

THE fourth and last volume of Sir Winston Churchill's *History of the English-Speaking Peoples* is THE GREAT DEMOCRACIES (Cassell. 30s.) and in this, one of the world's most distinguished historians traces the course taken by the fortunes of our country and of the United States—or, more exactly—North America during the nineteenth century. For us, this was the century which saw the growth and the highest moments of the British Empire. For the Americans, it saw an amazing expansion of land and economic interests, the bitterness of their Civil War and their rise to the status of a world power. The Industrial Revolution altered, basically, the lives of every Englishman. After the American war between the states and the eventual Federal victory, the alteration was mainly expressed in the closer knitting of those states.

Sir Winston has closed the book and the series with the death of Queen Victoria at the very beginning of our own century. His concluding words are clear, portentous and founded, not on optimism, but on the lessons of history. "Here is set out a long story of the English-Speaking Peoples," he writes. "They are now to become allies in terrible but victorious wars. And that is not the end. Another phase looms before us, in which alliance will once more be tested and in which its formidable virtues may be to preserve Peace and Freedom. The future is unknowable, but the past should give us hope. Nor should we now seek to define precisely the exact terms of ultimate union."

As I finished this volume and planned, as I expect many, many readers will, to study them again from the beginning and as a complete work, I thought that it may well be, fifty years and more ahead, that historians will study these books, and their writer who has been part of English history, and repeat to themselves: "There were giants in the earth in those days."

The history of a great regiment, when it covers 200 years of unbroken tradition, loyalty and service, is an inspiration not only to the men who are connected with it but to the general reader who cares about his country's own soldiers and his country's history. THE FIRST PUNJABIS (Gale and Polden. 30s.) is such a book, for it covers the period from 1759 and the birth of this, the oldest regiment in the great Volunteer Army raised by the British in India, to 1956 and its role as part of the new Army of Pakistan. In his prologue Field-Marshal Sir Claude Auchinleck expresses his own sentiments and does so with a rare felicity.

"For myself," he writes, "I count it a great honour to have been allowed to write a prologue to this story of the regiment which I joined fifty-two years ago in April 1904, and to which I have belonged ever since: in it I learned from my elders and betters, Indian and British, something of what is demanded of a soldier."

The young Pakistani Regimental officer, Major Mohammed Ibrahim Qureshi, who has compiled this long and impressive record, should be congratulated on his industry certainly but, far more than that, on the lucidity of his treatment and on the orderly progression of historical facts. It must have been a daunting task to attempt since it necessarily had to be, more than a regimental history, a study of the long British connection with India, but Major Qureshi has acquitted himself admirably. When one considers that the battle honours of the First Punjabis include such campaigns as that waged against Tippu Sultan, the defence of Kut El Amara, the battle of El Alamein and the final pursuit in Italy, the range of the regiment's operations will be appreciated. Of their gallantry there are countless examples and their tradition is still exemplified in the person of the Chief of the General Staff, Pakistan Army, Major-General Nawabzada Sher Ali Khan, himself a First Punjabi.

The next group of books, some fact, some fiction with a strong leavening of fact, illustrate the most sombre aspects of war in general and tyranny in particular. TOMORROW SOMETIMES COMES (Odhams. 18s.), by Mr. L. J. Ludovici, is the biography of a Latvian called Albat whose life story, as Lord Attlee explains in his foreword, is typical of the tragic life of the peoples of the little Baltic states crushed between the upper and nether millstones of Fascist Germany and Communist Russia.

Before the war Albat was a merchant seaman, a captain, married and with three sons. He took German nationality during the war and survived though all his family were killed. At the end of the war he was sent to Karelia by the Russians as one of thousands of slave labourers. He escaped to his own country, joined the partisans against the Russians, was arrested as a spy and this time sent to a mining camp in Siberia "where it was night for nine months of the year." In 1954 he was brought back but it was not until the end of 1955 that he was freed. This is as revealing a story of Russian slave labour as I have read and a terrible indictment.

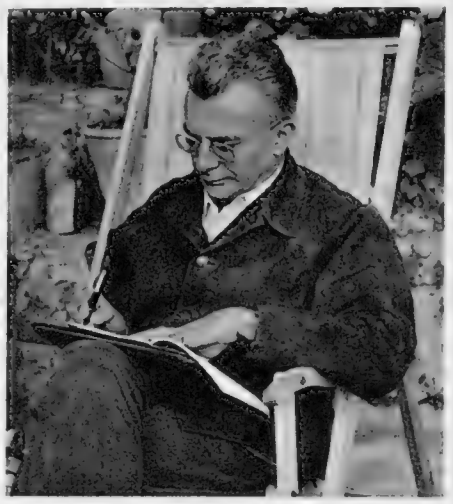
NO PLACE TO LAY MY HEAD (Odhams. 18s.) is Mr. Anthony Richardson's biography of a young man who was born a White Russian which meant that by 1944, in common with the rest of his people, he had suffered from both the occupying Germans and the equally ruthless Communist partisans. He was barely sixteen when his brother joined these latter fighters and, in a desperate attempt to save his family from reprisals, he himself joined a force of anti-partisans commanded by German officers. After horrible experiences he escaped and was later posted to the German front line when the Allies were advancing through Alsace. Eventually he gave himself up to the Americans, claimed Polish nationality, was permitted to join the Free Polish Army and finished the war in Italy as a member of the British Forces. Now he lives happily and domestically at Brighton where he works as an engineer. A story which, in a lesser degree than the last book, demonstrates an almost superhuman power of survival.

Mr. H. C. Branner, the Danish novelist, writes of Copenhagen towards the end of the German occupation. NO MAN KNOWS THE NIGHT (Secker and Warburg. 18s.), which has been translated by A. I. Roughton, explores the problems of a man bewildered by the Marxist tenets which he had hoped would lead him to reasonable beliefs, believing himself betrayed by the woman he loves and finally sacrificing himself in order to let a party of Resistance people escape to Sweden. Powerful, even brutal, but very compelling.

THE MAN WITH GOOD INTENTIONS (Cassell. 15s.) is Mr. James Barlow's novel about a different kind of idealist who parachutes into England on a mission to kill one Englishman on whose death, he believes, depends the peace of the world. Knowing that he is expendable, knowing that his cause is the only just one, trained by the men who are using him, he nevertheless finds everything different from what he had expected and leaves a trail of his own foreign eccentricities almost a mile wide. Good, taut, exciting reading with an adult and compassionate purpose behind it.

Mr. Ernest Raymond, novelist of the English and of Londoners *par excellence*, has concluded his cycle of sixteen London novels with THE CITY AND THE DREAM (Cassell. 16s.). In this story, set in present-day Clerkenwell and, within Clerkenwell, an early eighteenth-century house, Mr. Raymond has chosen as his principal characters a small, highly nervous, ungainly and brilliant man with an older sister lately released from confinement. The analogy with Charles Lamb and Mary is too obvious to be missed but, surprisingly, has nothing of the artificial about it. His Cockney personages are splendid and, with few exceptions, their speech faithfully reproduced. The keynote of the book is friendship and optimism and this is as heartening a theme as any writer could devise for the final book of a series.

POINT OF RETURN (Heinemann. 15s.) is a first novel which, almost to a textbook degree, exhibits the faults and the virtues of a first work. Miss Margaret Dick's writing has clarity, almost too much restraint and reserves of both taste and wide reading to support its claim to attention. Her setting, of an unidentified factory in a town near London is rather unsatisfactory simply because of the writer's caginess. One would have liked to know, for instance, what *kind* of objects was being made there. With her characters she is more successful and the reality of the office snooper, the office *femme fatale* and the office efficiency expert are recognisable from one end of an office canteen to another. When Miss Dick relaxes a little and shows that she enjoys her writing a little more her intelligence and her humanity will provide something far more exciting to read.



FRENCH AUTHOR CHARGED WITH INSULTING THE POPE: M. Roger Peyrefitte, the French author, is writing at his pension in Taormina, in Sicily, where he is on holiday, after the Vatican demand to the Italian authorities for action against the author over an article in an Italian newspaper. The article had stated that the Vatican was extending its influence to non-religious matters.

SOBER AS A JUDGE (Michael Joseph. 13s. 6d.) is by the author of *Brothers in Law*, Mr. Henry Cecil, who has been given Mr. P. G. Wodehouse's accolade and who is a funny and highly knowledgeable writer about the law, as it affects non-litigious beings. The new book is devoted, without too much continuity, to a discussion of some cases heard before the same Roger Thursby as we have met before and who has now been translated to the eminence of High Court judge. Mildly amusing, expert and, for the most part, a strong argument in favour of settling out of court.

Two American novels this week act as windows on strongly contrasted places and periods in the United States. BORN IN WEDLOCK (Michael Joseph. 16s.), the most recent in time, is Margaret Echard's lively account of the childhood of two sisters brought up rather erratically by their actor-father, indulgent to himself and to everyone else in so far as his means lasted, and their actress-mother, more enterprising as she was more down to earth. Pleasant mid-southern setting and readable but faintly sly child's eye-view accounts of grown-up goings-on.

THE UNFORGIVEN (Collins. 13s. 6d.) is what is loosely known as a Western. But a Western so tensely exciting, so well founded on historical fact—as far as an English reader can judge—and written with so few heroics that I will remember it for a long time. The period is eighty years ago, at the time of the Indian wars in the American West, when the dispossessed Indians were fighting with wiliness, toughness and extreme savagery against the white men. Mr. Alan Le May knows his West and he knows his local history, but his imaginative drive lifts the book far above sober record. Vernon Fane

FINAL CURTAIN

The Story of the St. James's Theatre

W. Macqueen Pope is a man of the theatre, with all the enthusiasms that the theatre breeds, and a deep knowledge of the theatre past and present. No one, therefore, could be more acceptable as the historian of the St. James's than "Popie," and, of course, only one person could have written the introduction—Vivien Leigh—who made that historic outburst to rouse the sepulchral calm of the Lords. Both are completely fair-minded in what they have to say about the public authorities involved in the great controversy. ST. JAMES'S, THEATRE OF DISTINCTION (W. H. Allen. 25s.) is an excellent account from curtain-rise to curtain-fall of this famed place of entertainment which has made so many stars and been associated with so many distinguished names: George Alexander, the Kendals, Pinero, and in modern days the Oliviers themselves. Mr. Pope cherishes the hope that the last fight for the St. James's may be the beginning of a new era in theatreland. He is probably right in believing that all the vast publicity that surrounded the demise of this ancient theatre ensures that threats of the same kind in central London will never again pass unnoticed until it is too late to take effective action.

Gilbert Harding's slim volume of reminiscences with the over-modest title MASTER OF NONE (Putnam. 12s. 6d.) is an engaging piece of work by this philosopher of the radio and television who, within this modern idiom, has found himself a Johnsonian niche. Boorishness and rudeness are sometimes the stock-in-trade of those who follow this sort of line, but television is all revealing, and most of us probably know more of friend Harding's true character than he does himself. At any rate this is a pleasant little book, full of shrewd observation, about happy people Mr. Harding has met in dull jobs, and discontented people in exciting jobs. There are excellent photographs.

For the last 2,000 years, says Robert Graves, it has been the fashion to dismiss the myths of ancient Greece as bizarre and chimerical fancies, a charming legacy from the childhood of the Greek intelligence. Mr. Graves will have none of this, declaring that it is difficult to overestimate the value of the myths in the study of early European history, religion and sociology. This eminent writer and scholar has now attempted a complete narrative of the myths and their variations, and an account of their origins in terms of modern opinion on ancient religion and culture. It has been an enormous task, but it has been done with verve, and the clarity of prose, the superb marshalling of facts, hold one fascinated. In GREEK MYTHS (Cassell. 30s.) is the whole panorama of mythology in up-to-date terms.

Here are two books that both deal in interesting fashion with our own coasts. SHALLOW WATERS (Robert Hale. 21s.) is the work of C. R. Benstead, who ranges historically and reminisces widely about everything that happens round our shores. One of his best stories concerns the ill-fated cross-Channel packet *Bessemer*,

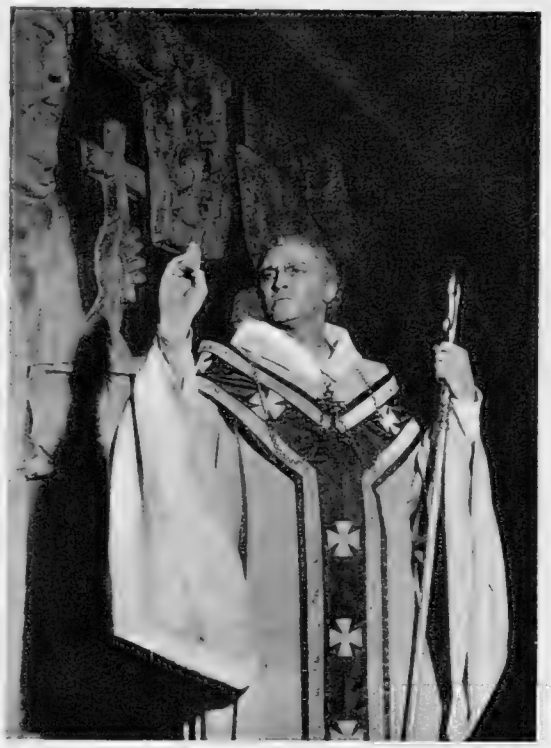
LAST OF THE MYTTONS

Stragglers from a dead era or a forgotten way of life are rather rare, but in fact only seven years intervened between the death of George Payne and the birth of Fred Cripps, whose deeds of daring and recklessness perhaps entitle him to carry my head-line, rounding-off the line of Mytton, Osbaldeston and Payne from the end of the eighteenth century to our World Wars. The first three were all besotted gamblers, utterly lacking in business sense. Fred Cripps was a member of a remarkably clever, sober and hard-working family of lawyers, statesmen and social reformers to whom life was earnest. In his autobiography, LIFE 'S A GAMBLE (Odhams. 25s.), it is made very clear that Fred Cripps was not ancestrally a throw-back. It is equally clear that something in his character endeared his way of life to his sober family who, themselves earnest, excused in him a life of pleasure. Indeed, they were a very devoted and happy family, and remarkably tolerant and broad-minded. For many reasons I find his autobiography pleasant and very readable. He gives us an attractive, true and sympathetic picture of his father and of his brother Stafford. If, as is usual in such books, some old chestnuts are cooked in a new dish, the bulk of his anecdotes are told with point and humour and modesty and we are made free of many youthful indiscretions of "F.E.", Winston, and many another bright, young subaltern of the Bucks and Oxfordshire Yeomanry. A Bullingdon group of 1906 poignantly confirms that modern life *is* a gamble. Where is that party now that blew horns in the High in fancy-dress when Edward VII was King ? A gambler still, Cripps brought off a successful Yeomanry charge against the Turks at El Mughar in World War I; and his business sojourns in Russia revealed him in the same role, and sadly unsuccessful. But men of courage and optimism can live very comfortably on distant prospects of fortunes even during bankrupt interludes. Colonel Cripps proves it with humour, modesty and zest. The index is totally devoid of system but works well enough. There are several slips. Randolph Baker is obscure as Rudolph, and Lord Barnby to-day is better known to his friends as Vernon. But it is all very good fun and quite devoid of pettiness and malice.

John Gore

BALLERINA RECEIVES THE C.B.E. : Miss Alicia Markova is pictured with her sisters, Miss Vivianne Marks (centre) and Mrs. Doris Barry (left), as she leaves her home to receive the C.B.E. from the Queen at an Investiture at Buckingham Palace. For the occasion the ballerina wore a black dress and a white hat.

AN OPERATIC VERSION OF "MURDER IN THE CATHEDRAL": The chorus of women of Canterbury, kneeling in emotional frustration, has been joined by a chorus of priests as four knights, swords raised, close in on the Archbishop, who is kneeling, holding a cross, on the steps leading to the altar. The first performance of Ildebrando Pizzetti's operatic version of T. S. Eliot's play was given at La Scala, Milan. He has set an Italian translation of the play (concerning the tragedy of the martyrdom of Thomas à-Becket in Canterbury Cathedral in the year 1170), shortened in its dialogue but not in its incidents. A most striking stage setting comprises a large cross, of which each of the four arms carries a design like that of a stained-glass window. It undergoes transformations enabling it to symbolise different aspects of the exterior and interior of Canterbury Cathedral.



AN IMPRESSIVE BASS SINGER: Nicola Rossi Lemeni is seen in the role of Thomas à-Becket, which he interpreted with great feeling and understanding.

"MURDER IN THE CATHEDRAL" AS OPERA

PRINCIPALS OF THE NEW OPERA : From left to right, Gianandrea Gavazzeni, conductor; Ildebrando Pizzetti, composer; Margherita Wallmann, producer, and Piero Zuffi, designer.

A SCENE FROM THE SECOND ACT: The four knights stand at the foot of the huge cross which has undergone a change to symbolise an inscription on a wall of Canterbury Cathedral. The magnificently impressive production was received enthusiastically on the first night, when a distinguished audience included the British Ambassador.

...e wonder anti-seasickness ship which made its ...aiden voyage from Dover in May 1875. The *Bessemer's* ...nti-rolling device was based on the theory that all you had ...o do was to suspend your saloon within the ship like a ...endulum, letting the ship swing about the pendulum, ...hich would remain vertical. The saloon, in practice, ...ailed to remain placidly horizontal, and it was with relief ...at its owners eventually had it locked to the hull, if only ...cut short the agonies of the passengers. Mr. Benstead ...full of good tales.

John Dunbar's THE LOST LAND (Collins. 18s.) is ...account of under-water exploration off the Scilly Isles. ...ere is much here to interest the archæologist and the ...turalist, and Mr. Dunbar, like Mr. Benstead, has a ...ht and engaging touch.

...RED JUNGLE (Robert Hale. 16s.) has an introduc...on by Earl Mountbatten of Burma, but it is not essen...lly a war book, although it is an account of one of the ...dio communication parties left behind in Malaya after ...e fall of Singapore. Here John Cross tells the story ...this British rearguard and how its surviving members ...me to terms with the jungle. The book is not all ...rdship and tension, it is full of human interest.

Latest addition to the *Golden Historical Atlas series* ...LANDS OF THE BIBLE (Rathbone Books. 30s.). ...is fully-illustrated story of Palestine, Egypt and the ...ddle East from Old and New Testament times to ...e present is up to the usual high standard of the series ...th the excellent relief maps in colour. The author is ...muel Terrien, and the illustrations are by William Bolin.

R.C.E.

A-BOMB ACCIDENT

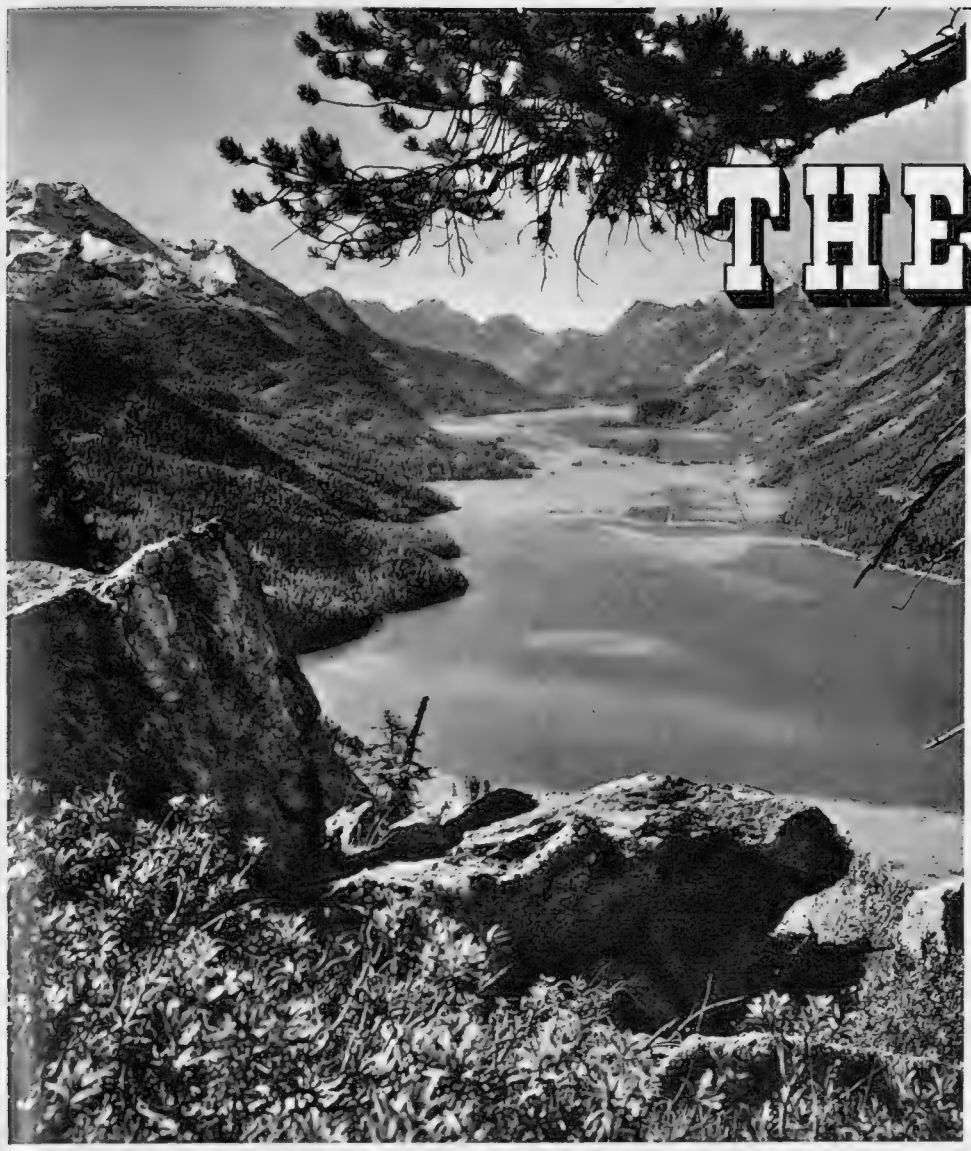
Results of the Accidental Dropping of a Nuclear Weapon in the U.S.

The report of the accidental dropping of an unarmed nuclear weapon from a B-47 bomber of the Strategic Air Command, causing damage and injury in a small rural community near Florence, South Carolina, has had repercussions in Great Britain. In particular it has disturbed those Members of Parliament who have been pressing in recent months for the ending of training flights over this country by aircraft carrying nuclear bombs. Questions concerning the accident have been raised in Congress and officials sought to reassure the American public that the possibility of an accidental nuclear explosion was so remote as to be negligible. They announced that there was never any danger of an atomic explosion while the bomb was "disarmed." There could have been the threat of radioactive contamination if the bomb had been completely destroyed, but this was not the case. It was also announced that the damage was much less severe than if an aircraft had accidentally dropped a conventional bomb or had crashed while carrying one. The bomb, complete except for its war-head, was dropped as a result of a mechanical—not a human—"malfunction." Something appeared to have gone wrong with the aircraft's bomb-release mechanism while it was on a training flight. The accident was the second in five weeks involving a B-47 from the Hunter Air Force Base in Georgia.

THE CRATER MADE BY THE NUCLEAR BOMB: An arrow (top right) points to the crater caused by an unarmed nuclear weapon which landed 100 yards away from a house in Florence, South Carolina, after being accidentally jettisoned from a B-47 bomber. The house was destroyed and although there were no fatalities five people received minor injuries.

AFTERMATH OF THE ACCIDENT: *Above*—A close-up view of the crater, 50 ft. in diameter and 20 ft. in depth. *On right*—The wrecked dining-room. Mrs. Walter Gregg, who was in the house, said afterwards: "I was sitting sewing and the next thing I knew I was crawling out from under boards and plaster."

THE RUINS OF WHAT WAS ONCE AN AMERICAN HOME: *Left*—Wreckage is strewn over the ground at the rear of the house at Florence, South Carolina. *Right*—The desolate scene from the front approach. Five other houses in the vicinity were also damaged. The accident occurred only a month after Mr. Strauss, Chairman of the United States Atomic Energy Commission, confirmed that there had been "several crashes" of American aircraft carrying atom bombs, but that no explosions had occurred.



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A CONTRIBUTION TO ROAD SAFETY

Looking Ahead to the Compulsory Testing Scheme for Vehicles; Cheaper Motoring; Comparison in Registration Figures; Road-building Activities and other News of Interest to Motorists

By "THE SPHERE" MOTORING CORRESPONDENT

IT looks as if the scheme for the compulsory testing of ten-year-old vehicles for roadworthiness will come into operation next autumn. Agreement has now been reached between the Minister of Transport (Mr. Harold Watkinson) and the motor trade on the question of what motorists will be asked to pay for the privilege of being told that their cars are (or are not) fit to be on the road. This hurdle having been overcome, the Minister says he hopes by the end of April to be in a position to invite applications from garages which would like to become authorised testing stations. For it is at local garages that most of the testing will be done, though there will also be a few municipal establishments.

The testing charges are higher than expected, but lower than the fees originally asked for by the motor trade. For cars, vans and three-wheelers it will be 15s. Owners of solo motor-cycles will have to pay 10s. 6d. In each case the garage man will keep all but a shilling of the fee. This he will have to send to the Ministry to cover administrative costs. For a start the test will be confined to brakes, lights and steering, though the 1956 Road Traffic Act also makes provision for tyres and silencers. It is not the cost of the test equipment the motor trade is worrying about. It is more concerned with the demands the scheme will make on garage space and on the time of skilled mechanics. I for one welcome the compulsory testing scheme. I think it will make a big contribution to road safety.

After dealing with this new financial burden for the motoring community I now switch to the other side of the balance sheet. It is not often that I have the pleasure of giving news of cheaper motoring. I was able to do so recently when the retail price of petrol was reduced by ¾d. a gallon. That was the seventh cut since April 1957. Now I am happy to record that tyres are cheaper; and that it has also cost less, since March 1, to replace a certain make of headlamp unit. The price of tyres came down by 5 per cent. at the beginning of the month. Dunlop, who command nearly half the tyre market in Great Britain, set the pace. The other tyre companies were not long in following their example. It means a saving of 6s. 10d. on a tubeless tyre for a Morris Minor, which now costs £6 10s. 8d. A Ford Zephyr cover now costs £7 15s. 4d. (a reduction of 8s. 2d.). If you own a Rolls-Royce Silver Cloud a tubeless tyre will cost you 19s. less, the reduced price being £18 2s. This is the first major cut in tyre prices in five years. In December 1956 there was a 10 per cent. rise as a result of the Suez Crisis.

Lucas announced that after March 1 it would cost 12s. 6d. instead of 15s. 6d. to replace their headlamp unit, comprising block-pattern lens, reflector and pre-focussed bulb-holder. I appreciate the advantages of the new sealed-beam headlamps, but I have always had a great deal of sympathy with car owners who object to having to buy a complete headlamp replacement unit when all they want is a glass or a reflector. This 3s. saving should have a slightly mollifying effect.

The effect of the credit restrictions is apparent in the registration figures for new cars in 1957. The total was 425,355. That was 25,680 more than in 1956 but 75,502 fewer than in 1955, which I believe was a record year. On the other hand, the number of new motor-cycle registrations (212,534) was well up on 1955.

According to the latest overall figures there are now some 7,500,000 mechanically-propelled vehicles on the roads of Britain. This total includes 4,186,000 cars, 1,471,000 motor-cycles and 1,215,000 commercial vehicles. The British Road Federation, who simply love working out these figures, tell me there is now one car for every 11.9 people living in Britain. Including lorries, taxis, vans, buses and motor-cycles, there is one *vehicle* to every 6.8 people. And there are 22.1 cars or 39.3 vehicles for every mile of road in Britain. Sometimes they all seem to be out and about at the same time!

It 's because our roads are getting so crowded and so inadequate to cope in safety with the traffic growth that Mr. Harold Watkinson, Minister of Transport, has found it necessary to introduce a differential speed limit. He has announced that as from last Saturday a 40 m.p.h. limit would be in force on eighty-three miles of main road in the London area. More than fifty different stretches of road are affected. On twenty-one miles of road the old 30 m.p.h. limit has been raised to 40. But there has been no speed restriction at all on the other sixty-two miles. If the experiment succeeds, Mr. Watkinson intends to extend the 40 m.p.h. limit beyond London. But before he can do this he must get Parliamentary sanction.

The Minister's general idea is to interpose a 40 m.p.h. limit, wherever possible, on main roads leading into big towns so that there will be a more gradual change from the high speeds permitted on the open road and the 30 m.p.h. limit in built-up areas.

The tempo of road-building activity in Britain increases all the time. Whatever is said about the adequacy of the Government's long-term plans, the fact is that an unavoidably long period of preliminary planning is now giving way to a programme of intensive road-building. By far the most spectacular feature of this will be the £15,000,000, fifty-three-mile motor road from London to Birmingham (or, more precisely, from Luton to Rugby). Work on this road is due to start next Monday. It is due for completion in the fantastically short period of nineteen months.

The work has been entrusted to John Laing and Sons Ltd., one of Britain's biggest contracting firms, which is still very much a family concern. To speak of a fifty-three-mile road is to do less than justice to the immensity of their task. For the greater part of its length the road will consist of twin-carriageways, each 36 ft. wide.

LUXURIOUS TAXI: This is the brougham which has been converted from a standard Austin taxi for Mr. Nubar Gulbenkian. Externally, the car has been given a new radiator and bonnet, and canework has been simulated on side and back panels. The conversion was made as a London cab seemed to Mr. Gulbenkian to be the quickest way to get about the congested streets. The work took 18 months.

COUNTRYMAN ADAPTATIONS FOR THE ROLLS-ROYCE SILVER CLOUD AND BENTLEY "S" SERIES: The many adaptations are now available to order exclusively from Harold Radford (Coachbuilders) Ltd., and include spacious lockers in the front door of the Silver Cloud.

Another important stretch of motor road already under construction is what is known as the Ross Spur. It will help to improve communications between Birmingham and South Wales. It will be more than twenty miles long and will cost £6,000,000. Mr. Harold Watkinson went down to Herefordshire the other day to inaugurate the work. In his rather self-congratulatory speech he said the money available for roads over the next four years had been increased to £240,000,000. Note that phrase "made available for." It would be even more encouraging had the Minister been able to say "will be spent on." (A picture showing the course of the new motorway through the woodland at Gorsley, in Gloucester, is on pages 448-49.)

Mr. Kenneth Kelly, secretary-general of the Automobile Association, has hopes that "by high summer" motorists will be able to tour in most countries of Western Europe without having to bother about any travel documents other than their passports. Countries which already admit tourist cars without triptiques or carnets are Western Germany, Sweden, Switzerland and Austria. France is expected to follow their example by April 1. Mr. Kelly thinks that Belgium will likewise abolish the carnet to encourage people to visit their world exhibition this summer, and that the other Benelux countries will fall into line. He does not think Spain would remain for long outside this new freedom movement.

What about the British Government? The motoring organisations have formally asked them to follow the Continental example, but there is as yet no sign that they will display this particular form of enlightenment. I have been asked if a British motorist would need any kind of document to get his car back into this country after visiting France when a carnet is no longer required there. The answer is "No." But if they go on demanding a triptique for foreign cars brought in to this country they are obviously going to discourage valuable tourist trade.

I am not altogether in agreement with Mr. Kelly on another subject he discussed the other day. Making it clear that he was merely expressing a personal opinion and was not necessarily speaking for the A.A., Mr. Kelly lashed out against the police over their reported intention to display the sign "Radar speed trap in operation." Mr. Kelly thinks the police may use such signs, even though there is no radar speed meter in operation, to frighten motorists into keeping down to 30 m.p.h. He seems to base this view on the fact that since the Oxfordshire and Surrey police started putting up "Plain clothes police patrols operating" signs the A.A. legal department has never been called upon to defend a member in a case arising from the use of "C" cars. The implication is that few, if any, "plain clothes" patrol cars have been used; that the signs are put up to scare the motorist into behaving himself. "I loathe those signs," said Mr. Kelly, "and I hope they will be stopped."

I find it difficult to follow Mr. Kelly's argument. He is against trapping with radar speed meters. It is much better, he says, to use the same number of men on road patrols, on the principle that the sight of a police car has a salutary effect. In other words, to remind erring motorists that there are certain rules they must observe and that there is a police force to see that the rules are followed. Isn't the display of warning signs simply another way of doing this? A motorist who is driving carefully need not worry, however many police signs he sees.

The latest edition of an old friend has just reached my desk en route for the glove-box of my car: the 1958 version of Mr. Ashley Courtenay's *Let 's Halt Awhile*. Since this excellent hotels guide first appeared in 1934, a quarter of a million copies of the popular annual have been sold. Inside the covers of this book is to be found a wealth of information and advice—416 pages of it, with plenty of illustrations—for motorists who are looking for the best hotels at the right price.

In case you are one of those who, quite rightly, say: "These annual reference-books get out of date too quickly" the author of this particular guide has his answer ready. He has formed a club—the Ashley Courtenay Circle—membership of which is free to all buyers of his guide, which costs 10s. 6d. Members may write at any time for free up-to-date advice on hotel accommodation in any area.

Finally, news in brief. . . . The R.A.C.'s diamond jubilee exhibition of paintings, models and relics—"The Age of the Motor Car," was visited by nearly 250,000 people in London and the provinces. . . .

The Rootes Group Singer Gazelle is now powered by the 1½-litre engine developed for the new Sunbeam Rapier, though the old overhead-camshaft Singer unit can still be had if preferred. . . .

The 1958 A.A. handbook, 2,250,000 copies of which are being distributed to members, now identifies garages which conform to the manufacturers' scale of repair and service charges. . . .

A thirty-two-page atlas is a feature of the R.A.C.'s 630-page 1958 Continental Handbook, which costs 6s. 6d. to members and 10s. 6d. to others.

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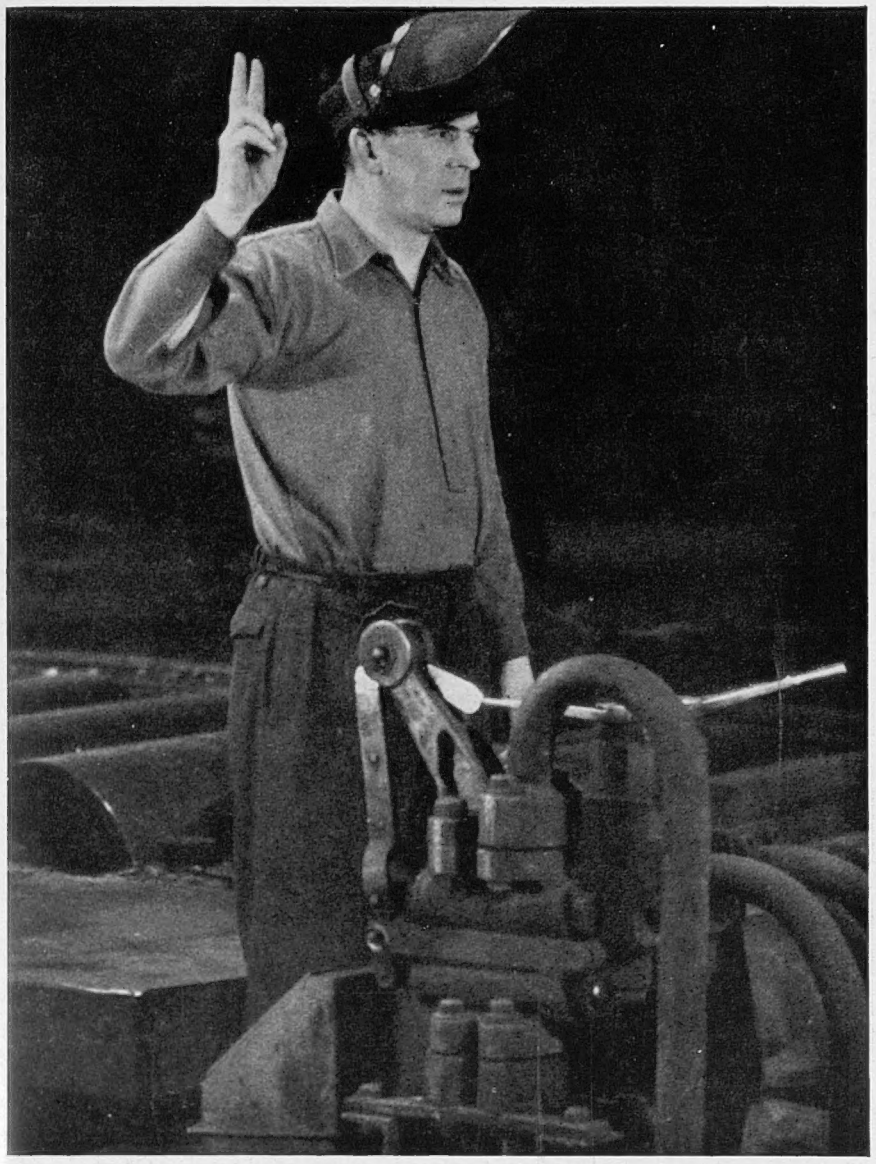


Controlling great masses of red-hot-steel calls for much the same qualities of concentration and skill as handling a four-engined bomber, says Jim McCubbin. He uses a complicated system of hand signals to govern the setting of the rolls.

Bomber pilot rolls steel plate

-and finds it not so different!

Jim McCubbin has a rewarding job—in every sense. Story by David Murray, writer and T.V. commentator Pictures by Kurt Hutton.

TEN YEARS AGO Jim McCubbin never imagined that he would ever be one of three Rollers in the big plate mill at Dalzell Steel Works, Motherwell, the most powerful of its kind in all Britain.

His youthful ambition was to be a veterinary surgeon. But the war set him on another course. In 1939, he joined the Royal Air Force as an Aircraftman (2nd Class). He was soon a Sergeant Pilot, next a Flight Sergeant, and at length a Flight Lieutenant. As a bomber pilot he did two full tours of duty, one with Coastal and the other with Bomber Command. Coming out of the R.A.F. two years after the war, he flew for B.E.A. between Belfast, Glasgow and London for another couple of years. That brought him to 1949, when he thought it was time to start a career with his two feet well on the ground.

HE GOT ON BETTER WITH HIS COAT OFF

The problem for ex-Flight Lieutenant James McCubbin, D.F.C., was what that career ought to be. Like many another young fellow out of the war, he did not fancy going back to his books. Having a good look at the steel trade in his native town it struck him that he need not go any further, and he jumped at the chance of a clerk's job in the Dalzell Steel Works. There he saw that he might make better progress with his jacket off than with it on.

To get among the pounding machinery, he became a stocktaker at the big plate mill. His big chance came when a third shift was manned at the rolls. Getting into real working togs, he took on the job of Breaking Down — rolling the great white-hot slabs to the proper width and passing them on to the Roller. In 1953, by which time he had learned a very great deal the hard way, he himself became a Roller, charged with finishing the plates to gauge.

The three Plate Mill Rollers who work in shift turns, are the key production men at Dalzell; it was rapid promotion for a man who had never set foot in a steel plant until he was close on thirty. But Jim McCubbin had rightly figured that there would be as good chances on the production side, as in the more bookish branches. He has, of course, attended classes and read more than the odd book on steel making. But his main classroom has been the plate mill.

As he says . . . "It's just like flying. You're up against mass power and the forces of nature. Even to stay still, you've got to keep going. . ."

WELL PAID—AND SATISFYING

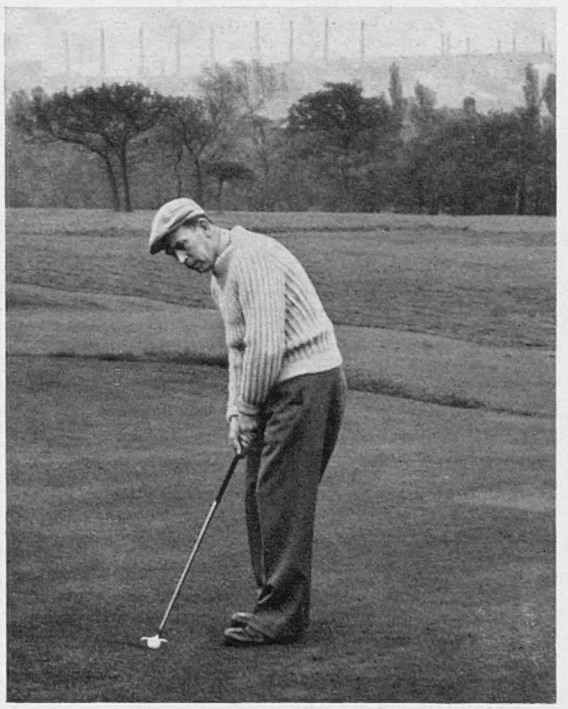
Off the job, which in view of its responsibility is well paid, even by professional standards, he likes good books and good music. In the summer he golfs. But his chief spare-time hobby is three-year-old, sloe-eyed, dark-haired Patricia Ellis McCubbin. Her middle name comes from grandfather Ben Ellis who played football years ago for Motherwell F.C.

To see Jim McCubbin and his two buddies on the other shifts, Bob Jaffrey and John Lang, putting through the plates, you might think that plate rolling is easy. But hot, plastic steel is what the Scots call "kittle stuff". The job in fact calls for as much stamina, nerve and operative skill as flying a big bomber.

That's why it's well paid. And that's one reason, though not the only one, why ex-Flight Lieutenant James McCubbin, D.F.C., went all out to be a Roller when he saw the chance.

As he says . . . "It feels as good to put in a good shift with no troubles, as to make the target and get back home."

This report was commissioned by the British Iron and Steel Federation, which believes that everyone in Britain should know the facts about Steel, and about the men and organisations that make it.



Away from it all ? Jim McCubbin is perfectly content to play his favourite game within sight of the works.

IN QUEST OF GOOD HOTELS

ADVICE BY ASHLEY COURTENAY

Letters, accompanied by a stamped, addressed envelope for reply, should be addressed to him, c/o The Editor, THE SPHERE, *Ingram House, 195–198, Strand, London, W.C.2.*

BANTRY, Co. Cork. ARDNAGASHEL HOUSE
25 yards from the sea. An Irish Country House Hotel in glorious scenery, with goggle-fishing, bathing, sailing; or just eating, drinking and being lazy. Write R. Kaulback.

BOURNEMOUTH, Alum Chine. STUDLAND DENE
The hotel nearest the sea. Modern, friendly. Good table and cellar. Club Bar and away from the madding crowd. Tel: Westbourne 64024.

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A most hospitable Country Hotel where modern comforts blend happily with seventeenth-century charm. Bedrooms and suites with private bath. Licensed. Renowned cuisine. T.V. Free Golf. Reopening (following structural alterations) March 31. Tel.: 836.

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LONDON, N.W.4. HENDON HALL
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LONDON, S.W.7. QUEENSBERRY COURT HOTEL
Close South Kensington Underground and Air Terminal. 41 bedrooms (radio equipped). Some private baths. TV. Licensed. Friendly environment. Tel.: KEN 3693.

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Visiting Lancashire—and would appreciate a private bathroom, excellent cuisine and service plus a quiet healthy sea aspect? Then this is the hotel to make for. Tel.: Lytham 6245.

NR. OXFORD, WESTON-ON-THE-GREEN. WESTON MANOR HOTEL
Mrs. M. L. Sears is now resident owner of this historic hotel. C.H. throughout. Private bathrooms. Squash court. Week-end dance. Haute cuisine. Licensed. 9 miles Oxford. Tel.: Bletchington 60.

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Facing sea and the south, for holiday or residence at any time of the year. 65 bedrooms. Lift. Generous fare. TV. Cocktail Lounge. Excellent train service. Good centre. Tel.: 2371.

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THIS TOUR OF IRELAND is the final of a series. Previous ones covered England, Scotland and Wales, and reprints can be obtained on request (please enclose stamped, addressed envelope).

How and where you arrive in Ireland is largely a matter of where you are coming from, and let me add now for the benefit of motorists that unless you are stopping over for at least three weeks it is, I have found, cheaper and more convenient to arrange for a self-drive hire car to be awaiting you at the port of arrival. If you are taking your own car your best plan is to link up with the Automobile Association, who can make all the necessary arrangements. They, for example, can arrange for motorists and their cars to fly on the Air Service from the Belfast area to Stranraer, in Scotland, in 17 minutes.

Personally, in order to fit in the English Lake District and the south-west corner of Scotland this year, my wife and I plan to go over by sea from Stranraer to Larne. Besides our car, we are taking with us that invaluable handbook, the *A.A. Road Book of Ireland*; published at 12s. 6d. and only available to members, it makes a most informative travelling companion.

There are two advantages of crossing from Stranraer. It is the shortest sea crossing between Britain and Ireland and is the commencing point for the Antrim coast road which is an eye-opener on coastal scenery. This is one of Europe's finest marine drives and runs from Larne to Portrush, a distance of sixty miles. Unfortunately, we have no personally recommended hotels along its route, but I have hopes of finding some at Ballycastle, Cushendun or Cushendall. At Portrush, famous for golf, we shall probably stay at the 100-bedroomed Northern Counties Hotel or, four miles beyond, the Strand Hotel at Portstewart.

The next day, our route will take us to historic Londonderry and, 4½ miles out, we shall cross the border into Southern Ireland. Then, it is about 23 miles on to Letterkenny and about a further 26 miles to Rosapenna Hotel, which provides for its visitors not only a famous golf links, but wonderful scenery, good sands and bathing, and everything else that one connects with holiday enjoyment. Leaving Rosapenna with reluctance, we shall take, weather permitting, the A.A. route 49 through the wild moorland, river, lough and coastal scenery, down to Donegal—92 miles of adventure.

Bundoran is the next stopping place (recommended hotels—Great Northern or Shene House), although an alternative is to push on to The Yeats Country Hotel at Rosses Point, just north of Sligo; it stands by the fairway of a championship golf course and is but a few yards from the sea.

Now ask for the A.A. route southwards via Dromore, West Ballina and Foxford, making Pontoon Bridge Hotel on the shore of Lough Conn your objective for a meal or, better still, the night. This well-known haunt of fishermen is surprisingly modern and comfortable.

Connemara is the next great scenic attraction and choose a fine day for touring around, if you can! Probably the best plan would be to make one's headquarters at Ashford Castle Hotel at Cong, reached via Castlebar and Ballinrobe, or head further south for Galway and The Great Southern Hotel, The Warwick at Salthill or at the gateway to Connemara, "Currarevagh" Guest House at Oughterard, where Mr. and Mrs. Henry Hodgson will not only feed you on the fat of the land, but give you the happy experience of a genuine Irish country home. From Galway southwards, I would advocate going straight down through to Limerick and the Killarney area. Note, *en route*, the following hotels should you be seeking a meal or refreshment: Glynn's Hotel at Gort, The Old Ground at Ennis, The Dunraven Arms beyond Limerick and, in order to be right on the water, The Lake Hotel, Killarney.

Now take the road around Dingle Bay to Waterville, stopping for a meal or the night at the following: The Butler Arms and the Southern Lake Hotels at Waterville, The Great Southern Hotel at Parknasilla and, if you have a desire for a small place and can get in, the small Tahilla Cove Guest House beyond Parknasilla.

A fine road leads from Kenmare to Bantry, where the following hotels are personally recommended: Ardnagashel House and Ballylickey House. From Bantry to Cork the diversion to Kinsale and Crosshaven is well worth while. Near the latter, divert for a meal or the night to Bunnyconnellan Hotel at Myrtleville, and for a good vantage view of Cork Harbour make for The Anchorage Guest House at Cobh.

The direct road to Cork is a matter of 160 miles and there is little to detain one *en route*, although Dublin might well hold you for days. Few cities of its size can boast so many good hotels and in the first grade are The Gresham, Shelbourne, Royal Hibernian and Russell. Of the smaller ones, I have best knowledge of The Ivanhoe, in Harcourt Street (forty bedrooms), and as clean as the proverbial whistle.

To complete our circuit of Ireland we must head back to our starting point at Larne. It would be best to take the straight road to Slane and on to just short of Dundalk, Ballymascanlon House Hotel, where Mrs. Quinn will give you a final southern Irish welcome before you cross the border for Newry and by the coast road to Kilkeel, Newcastle and to Northern Ireland's capital, Belfast. This is a fascinating city, so easy to get into, so congested to get out of, but it makes a good centre for the Ards Peninsula, The Glens of Antrim, and for a run around Lough Neagh, Ireland's largest lake.

What have we missed? Precious little, though note, should you be motoring through Athlone, The Shamrock Hotel; at Mullingar, The Greville Arms; and The Headfort Arms at Kells.

We love motoring in Ireland; the roads are, for the most part, good, there is little traffic and everywhere we experience that delightful Irish smile.

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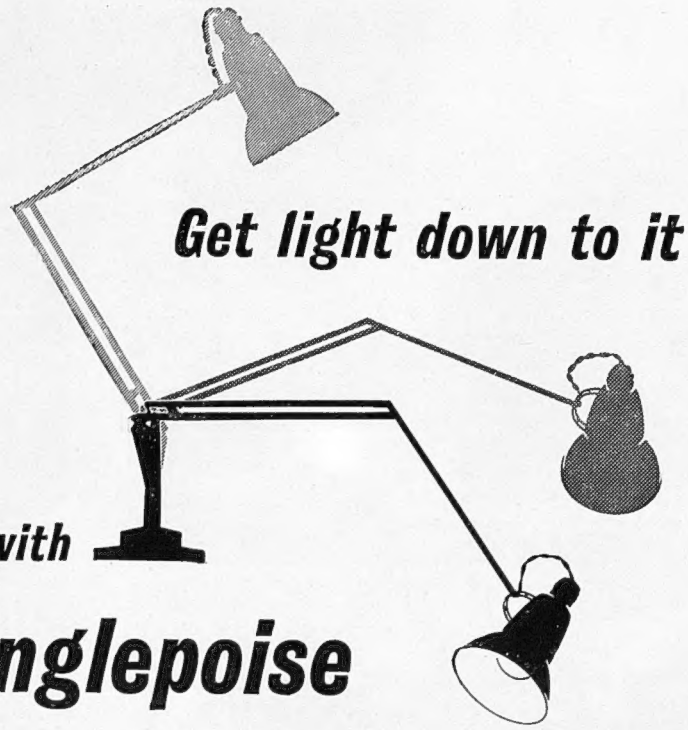

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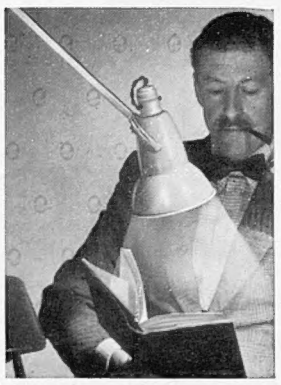

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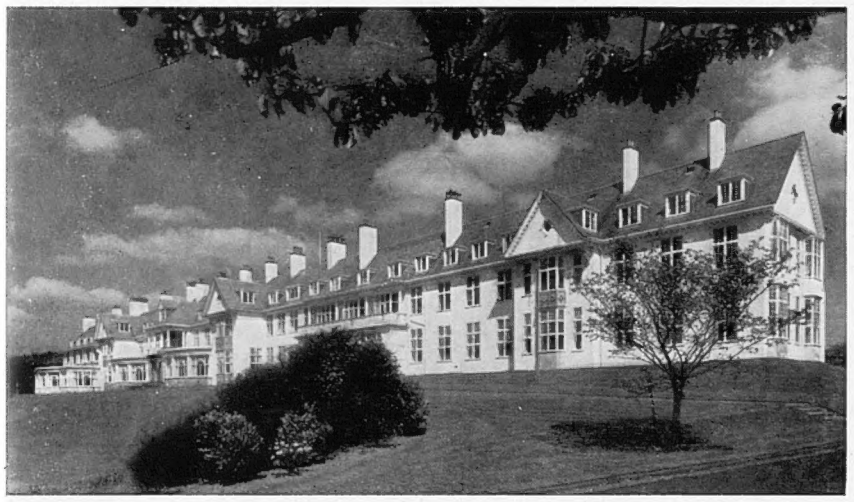

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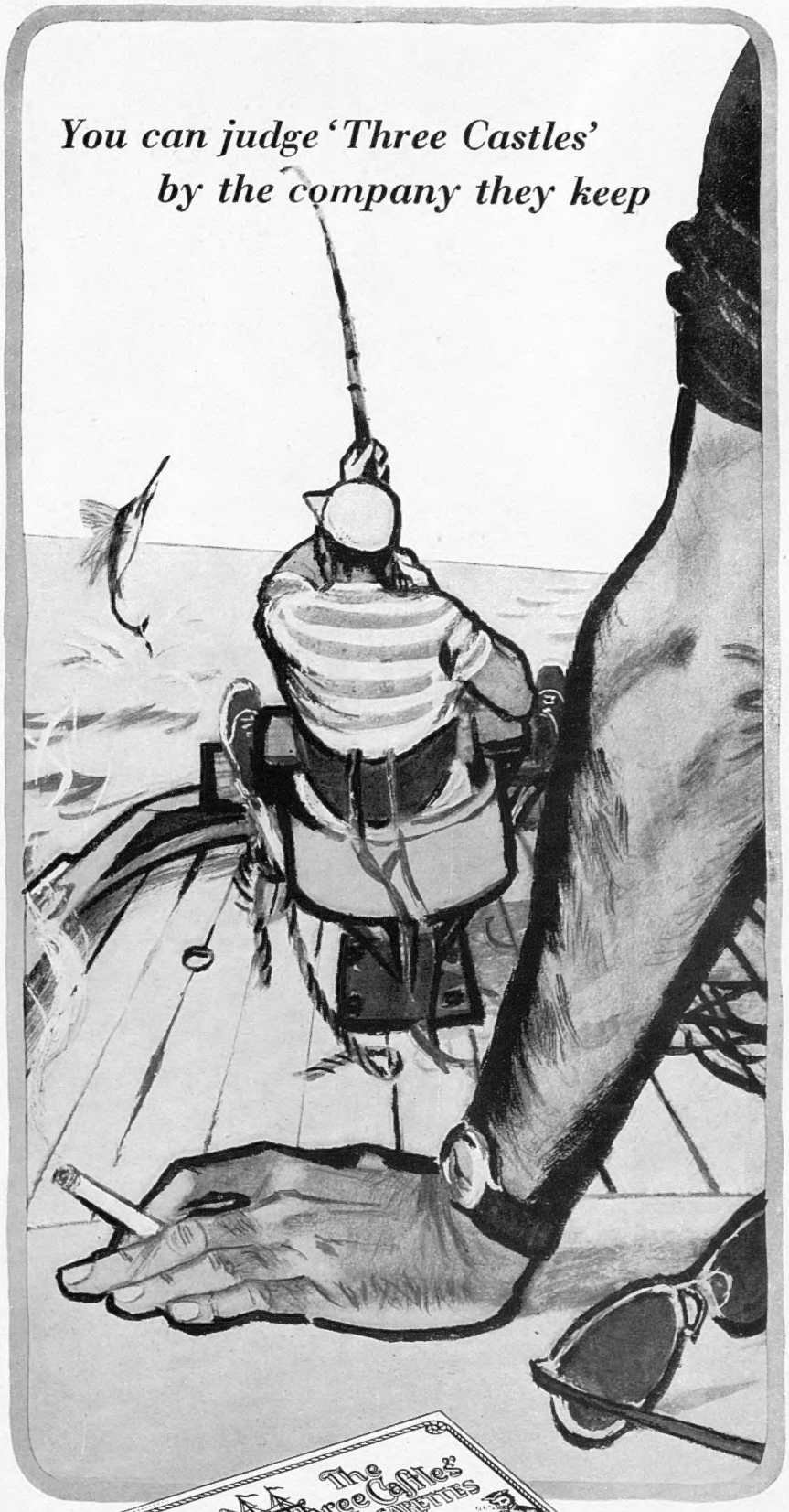

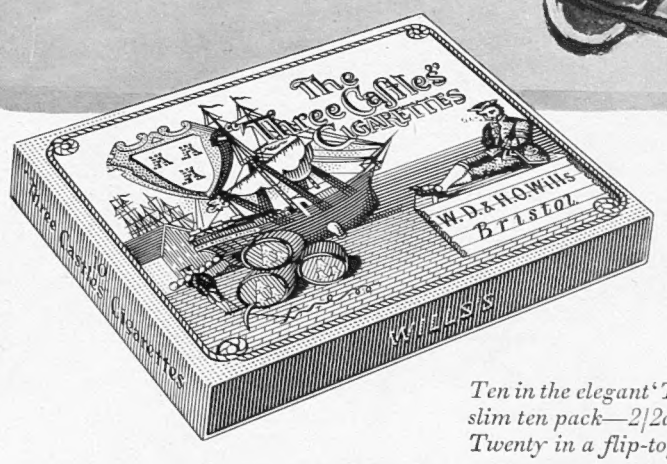

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